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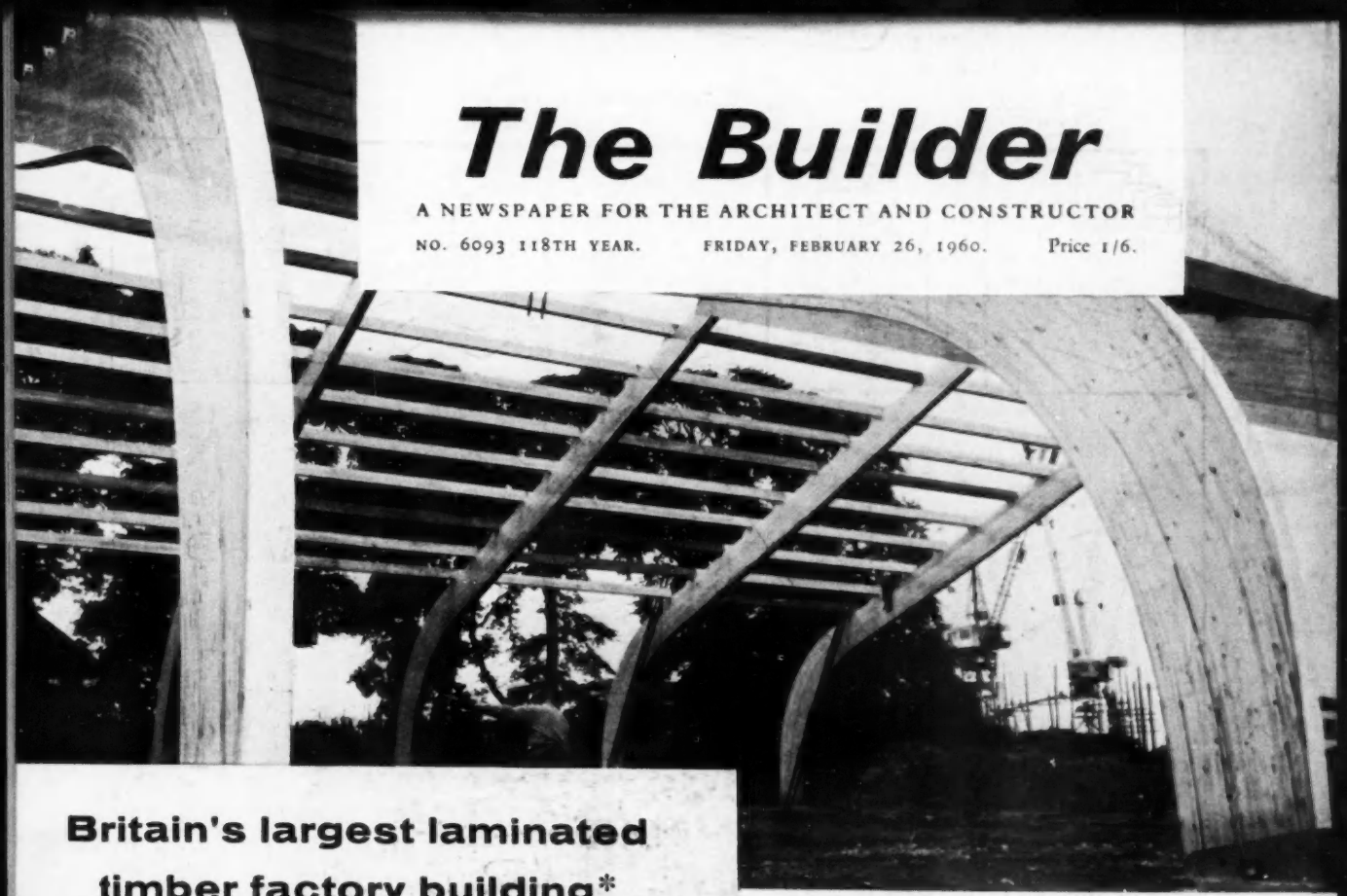

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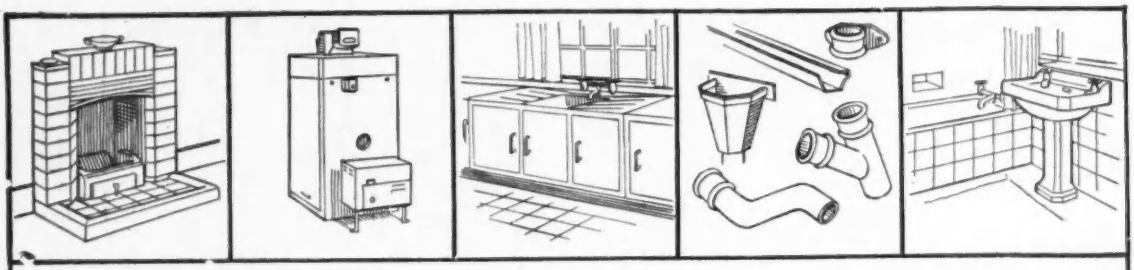

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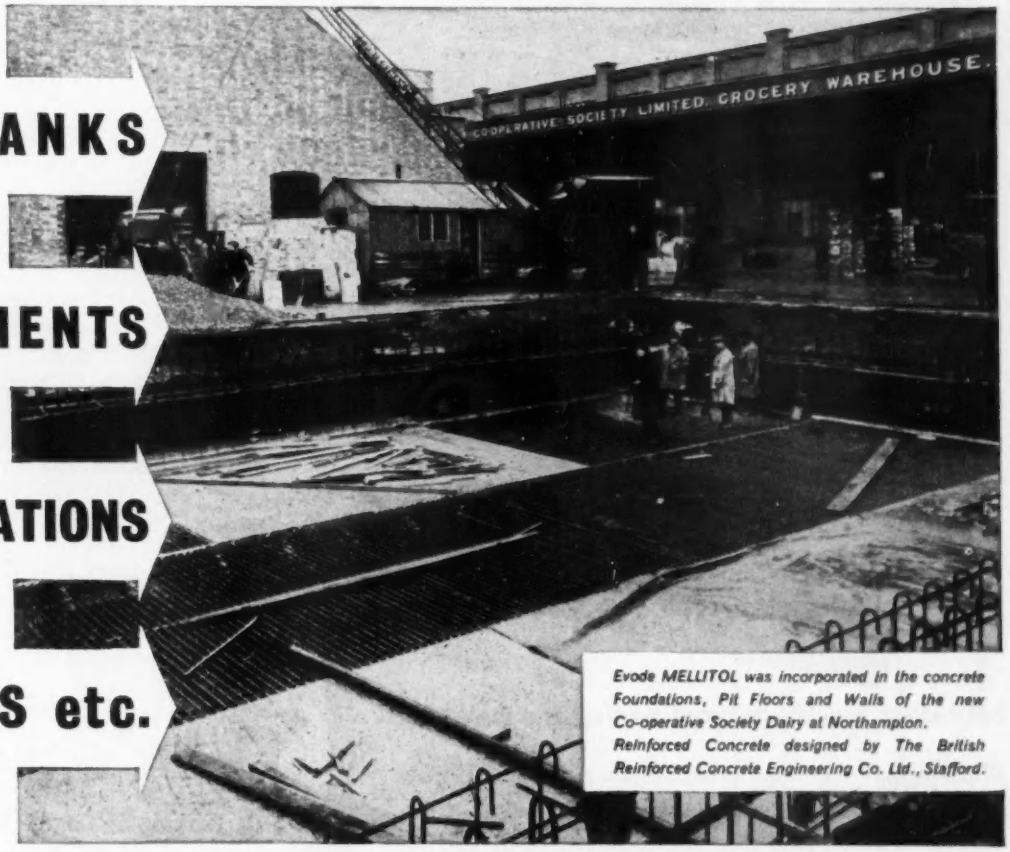

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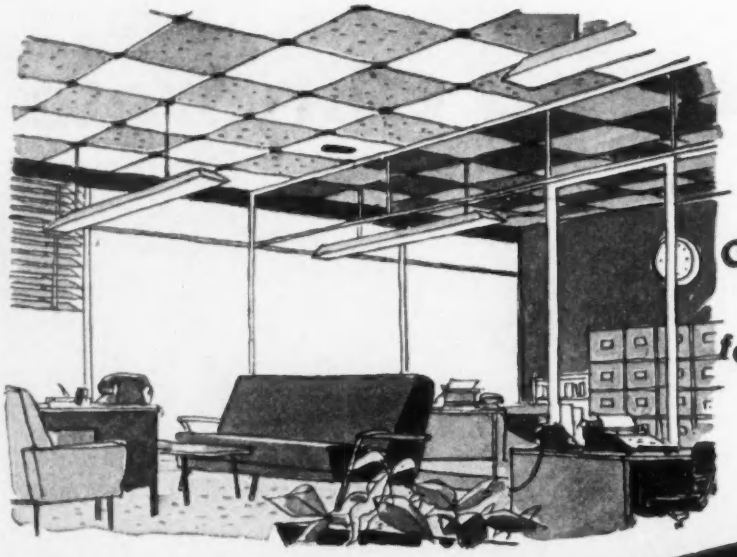

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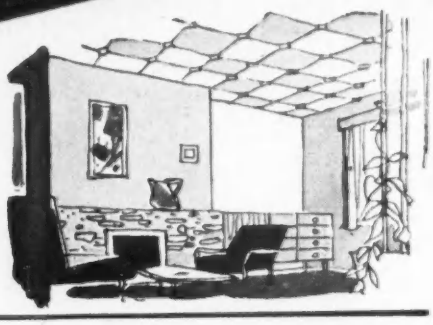

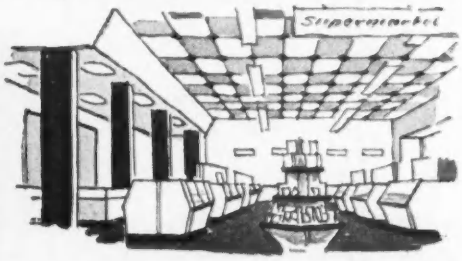

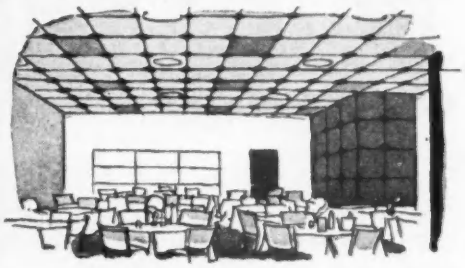

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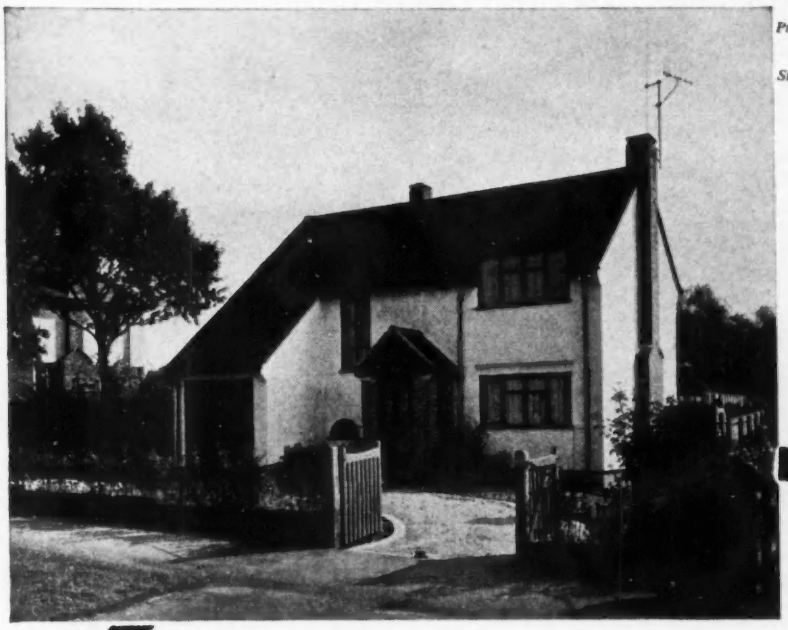

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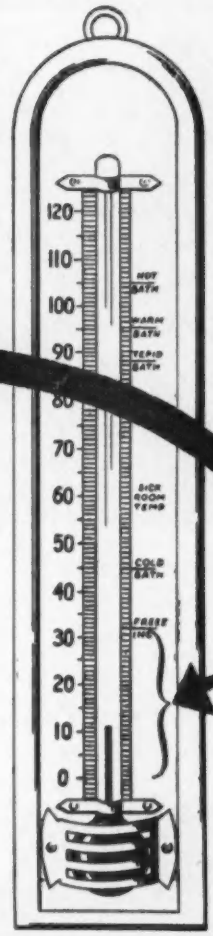

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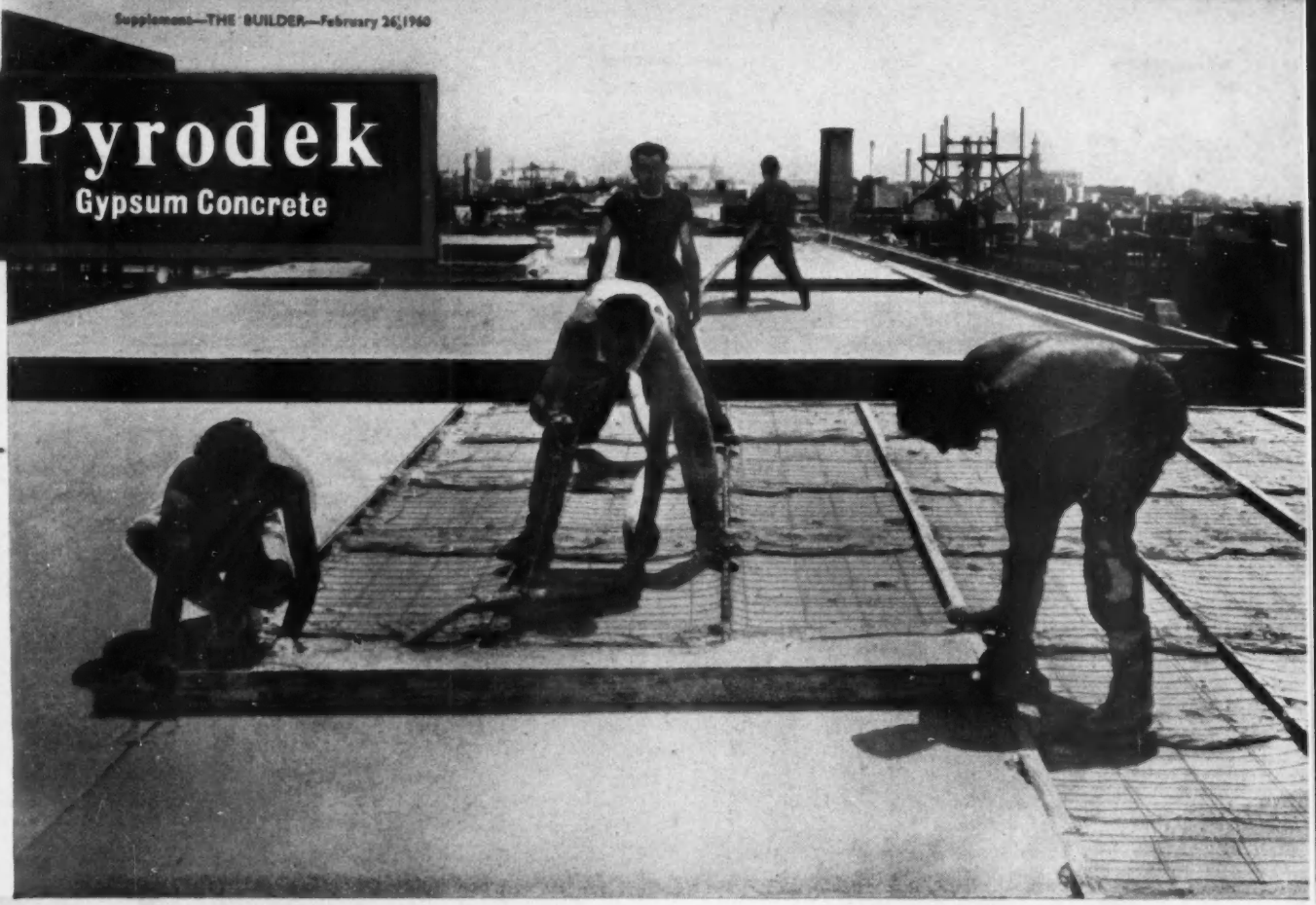
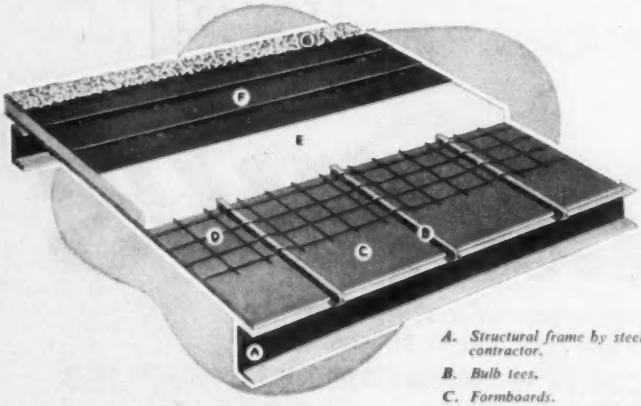


High speed construction by ANDERSON



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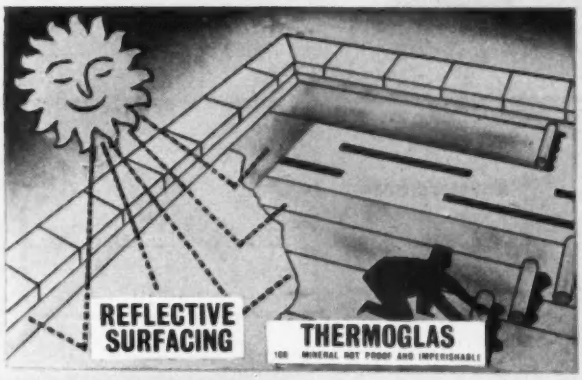
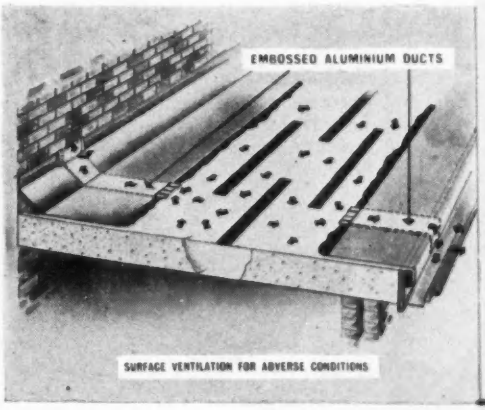
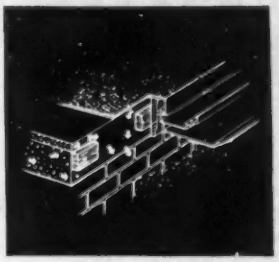


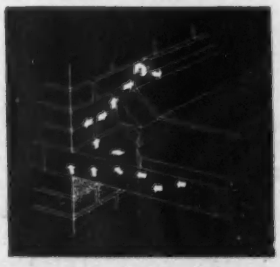
Where conditions are adverse surface ventilation is provided and metal ducts are fixed to relieve pressure to the outside air.





Drying in depth for extreme conditions is arranged at planning stage.

Typical detail is shown but others are available to suit design and advice will be given on request.



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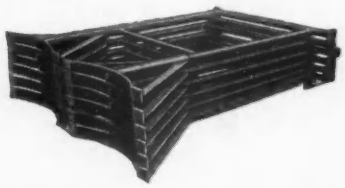
4	6 ft. 3 in. „ „ 8 ft. 0 in.	100



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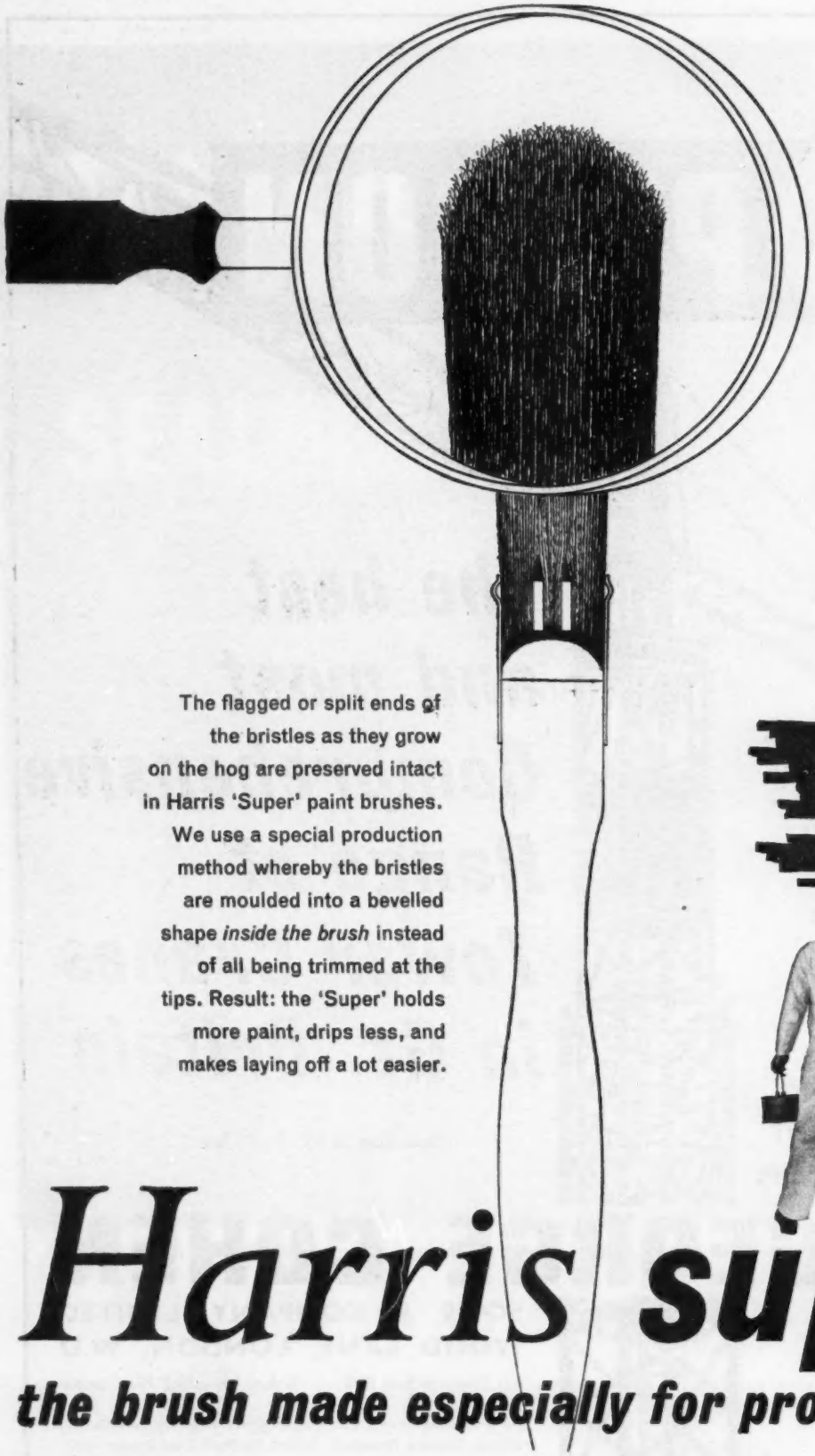

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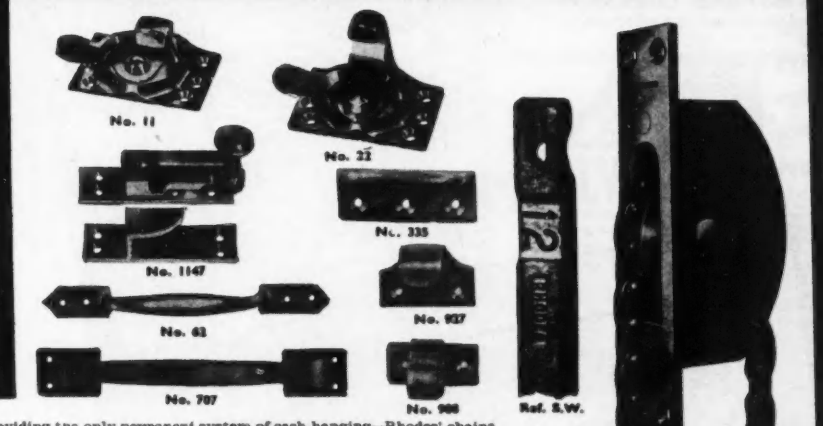

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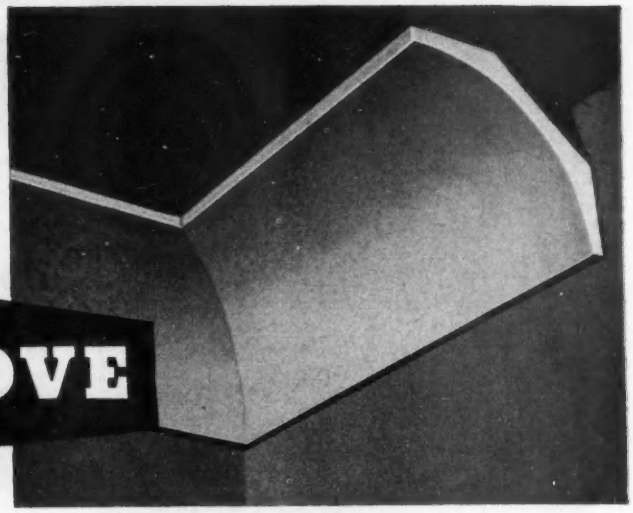

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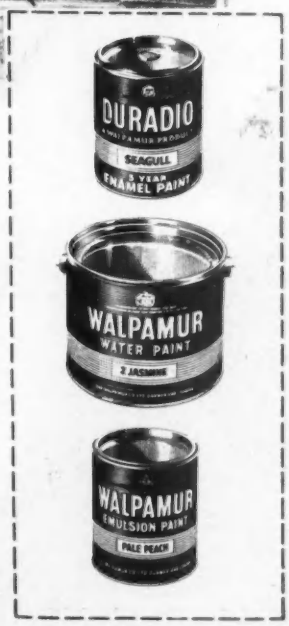

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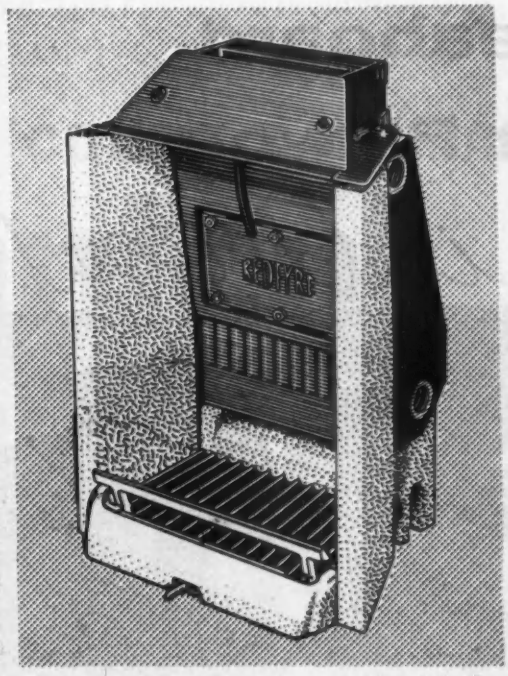

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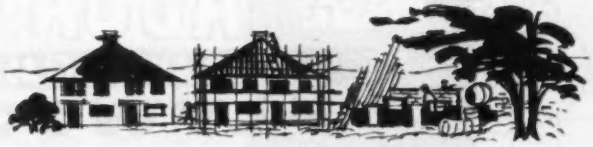

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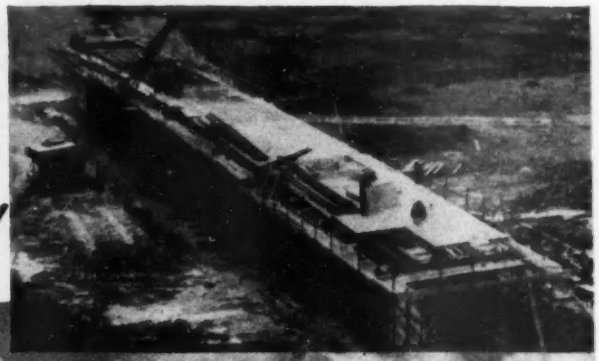

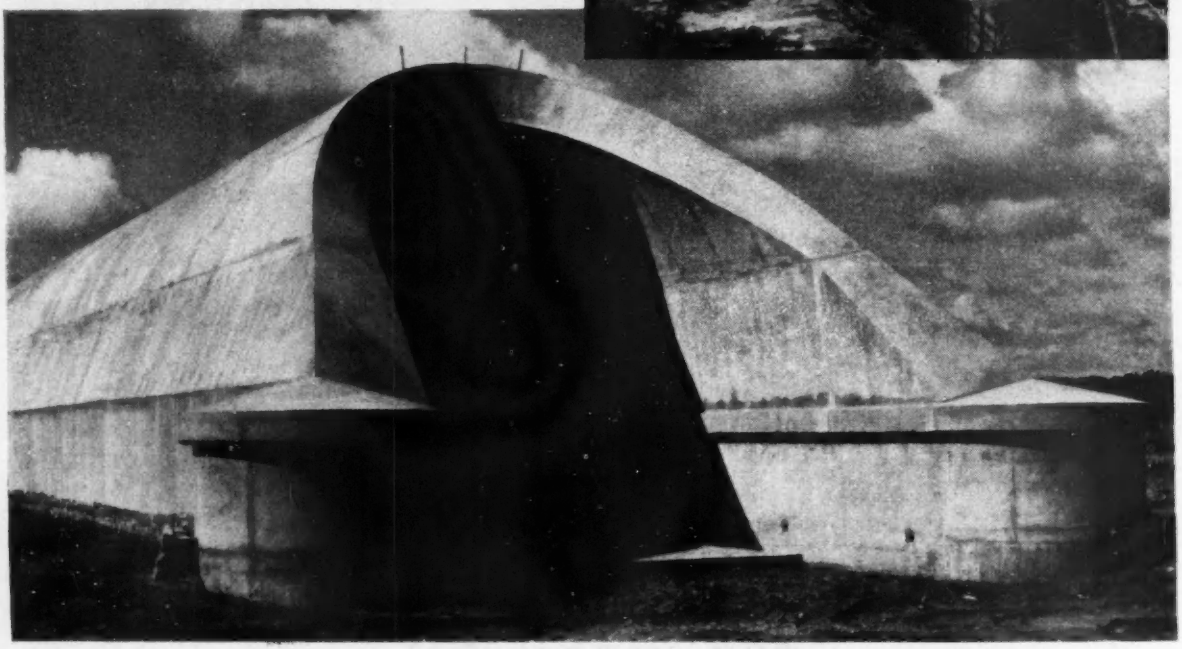

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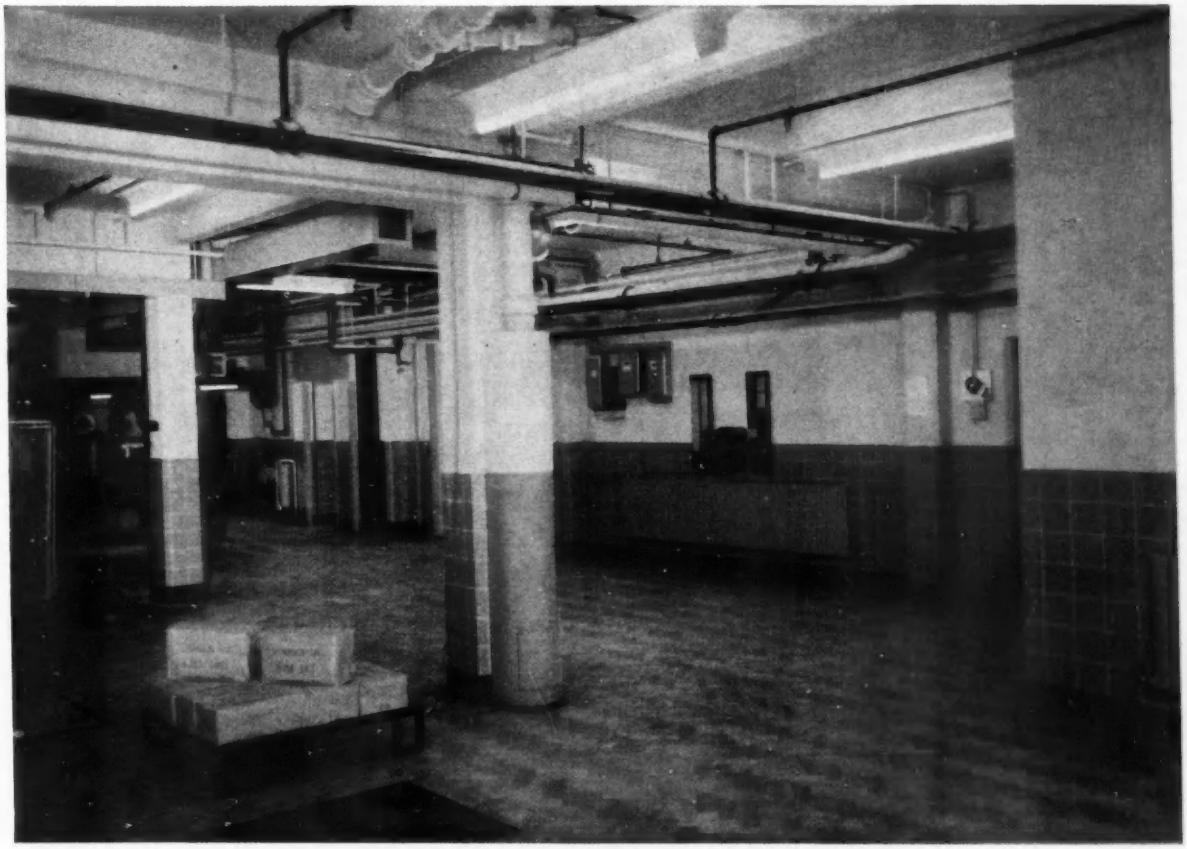

Architects: S. N. Cooke & Partners, F/F.R.I.B.A. Chartered Architects.
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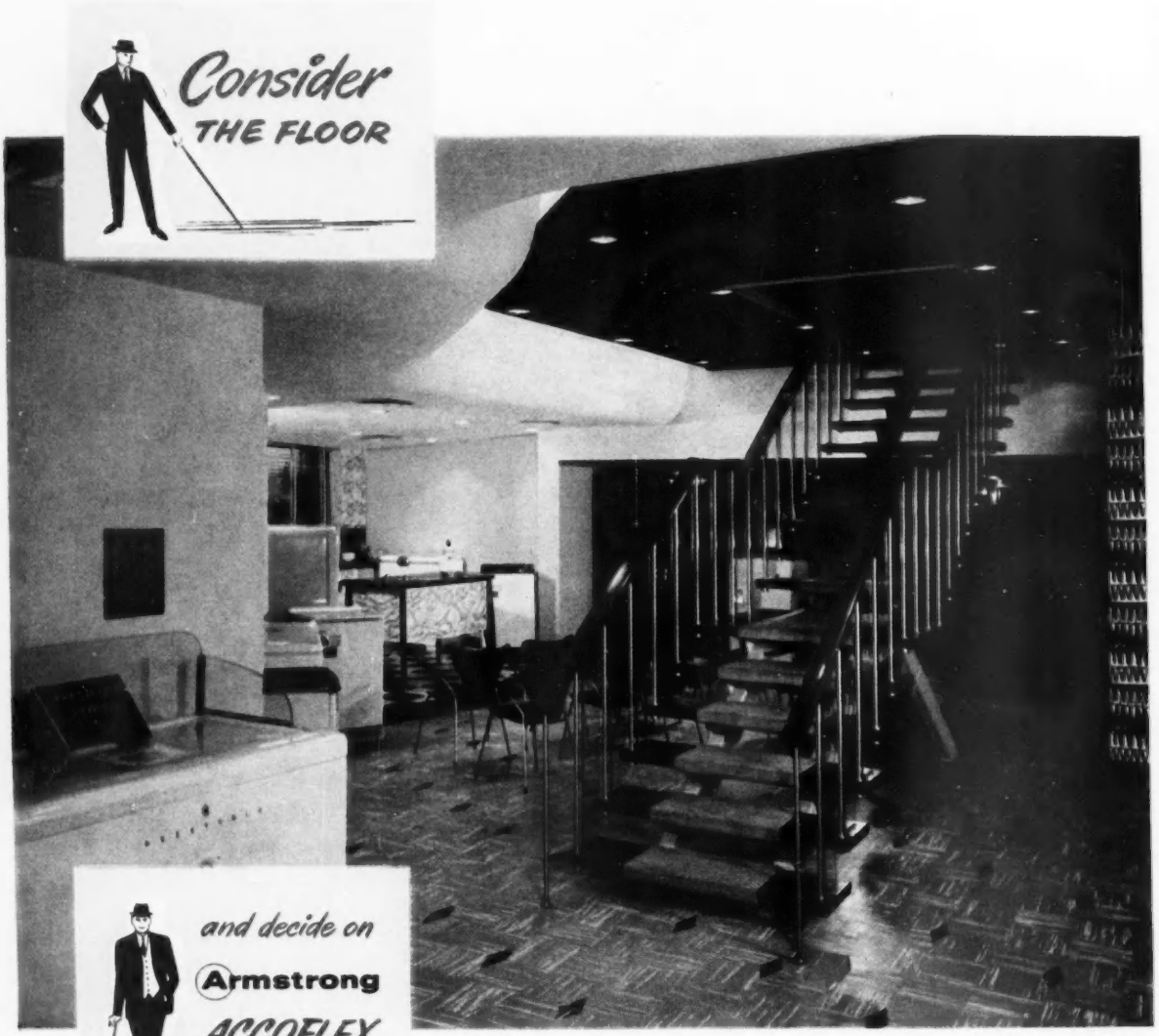

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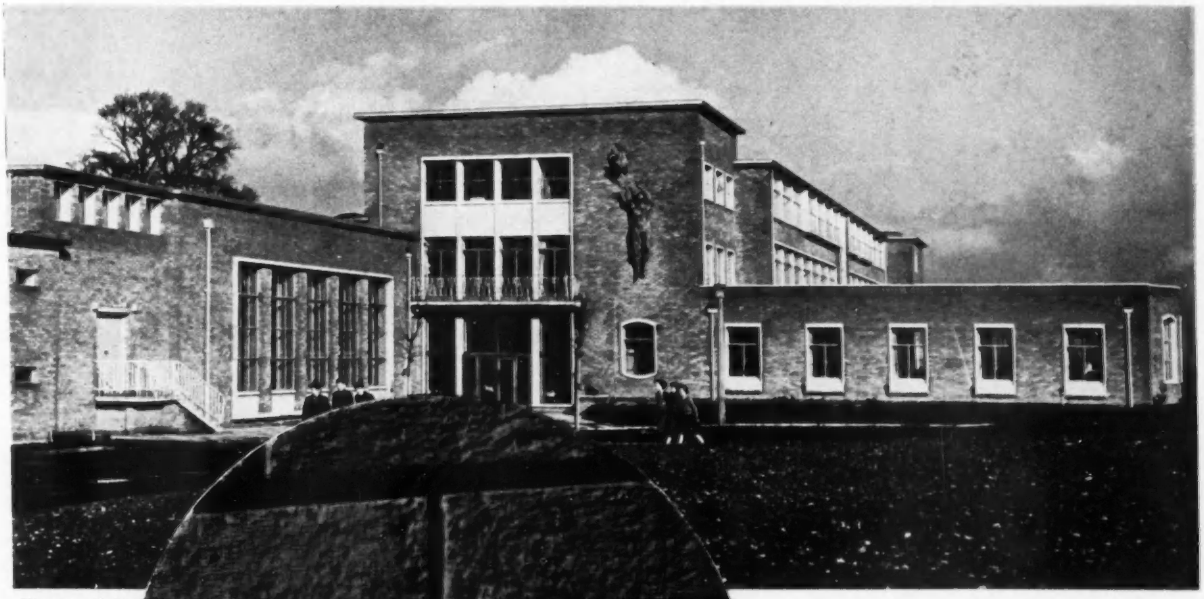

View towards the main entrance

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for the County of Leicester Education Committee

County Architect: T. A. COLLINS, F.R.I.B.A.
Assistant County Architect: E. D. SMITH, A.R.I.B.A
Architects in charge: J. N. PITTS, A.R.I.B.A., and J. T. HIRST A.R.I.B.A.
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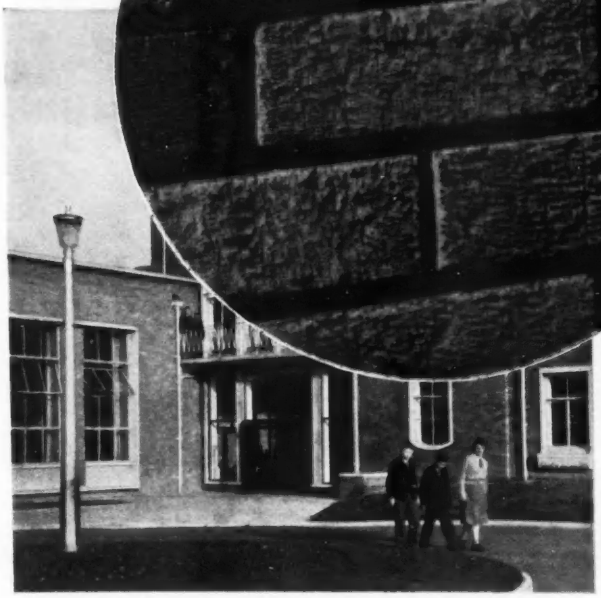

Detail of main entrance *Sculpture by Ben Smith*

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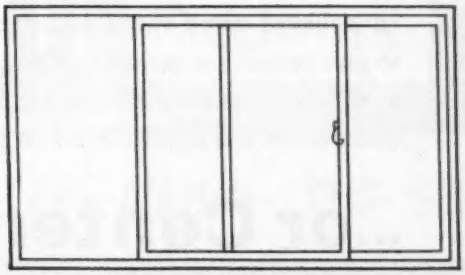
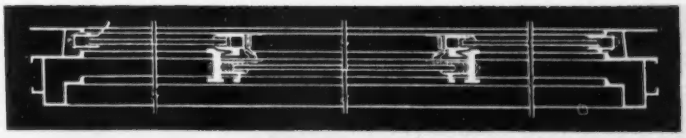
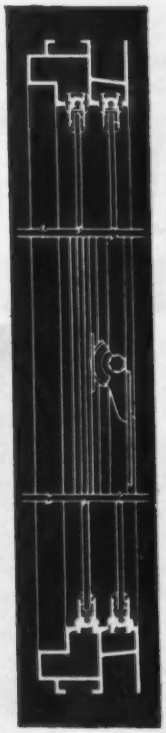


Horizontal sliding : 3′ × 3′ to 4′ × 6′



Picture windows : 3′ × 6′ 8″ to 4′ × 9′



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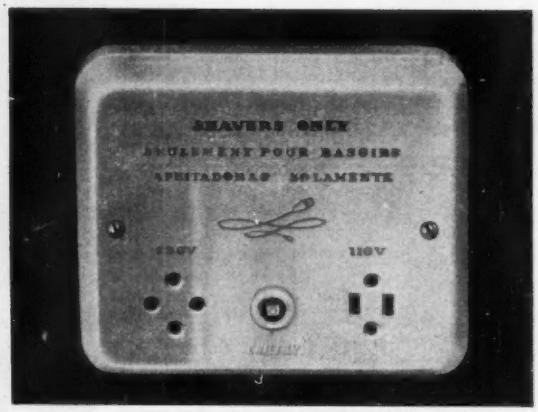

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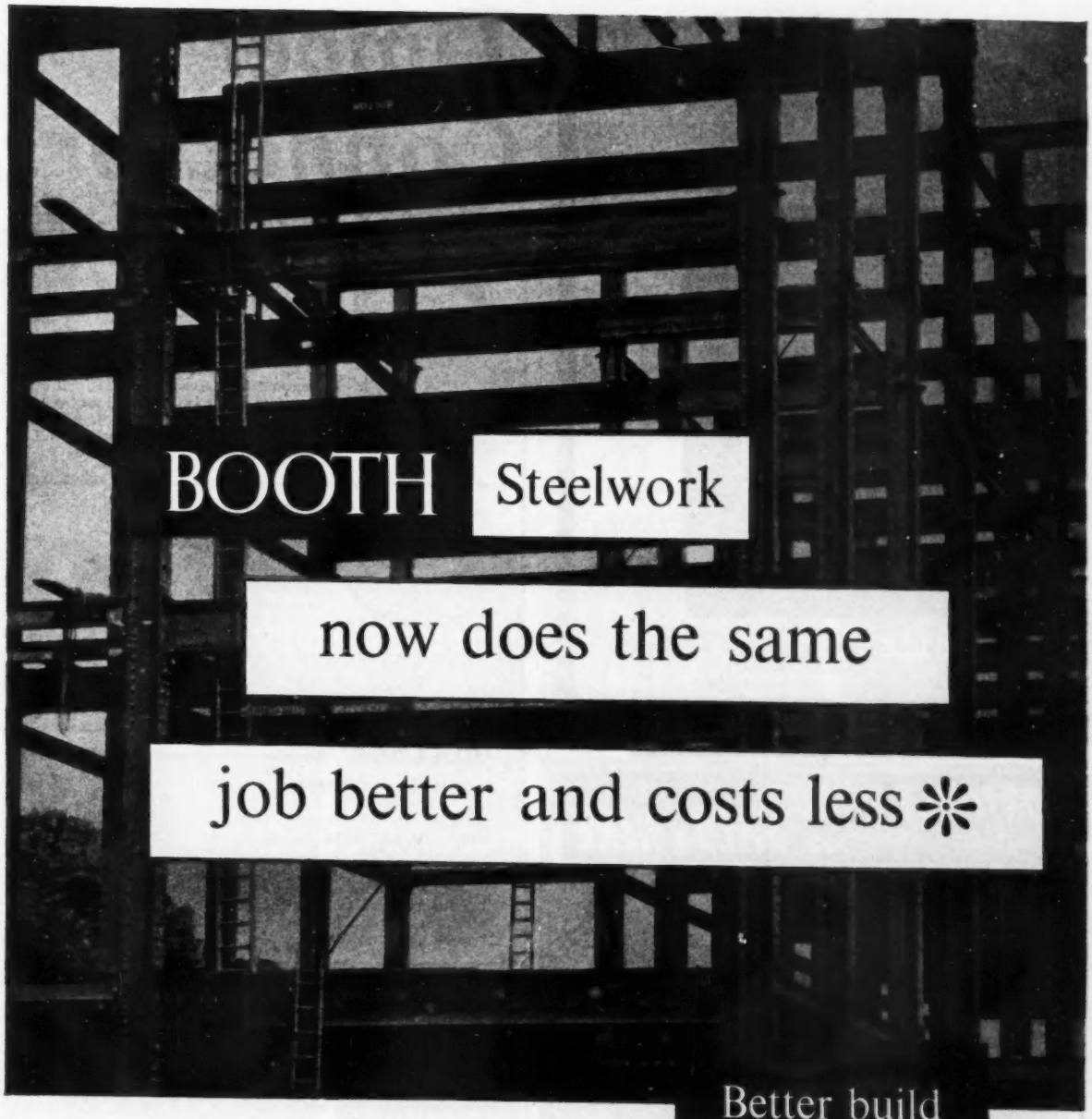

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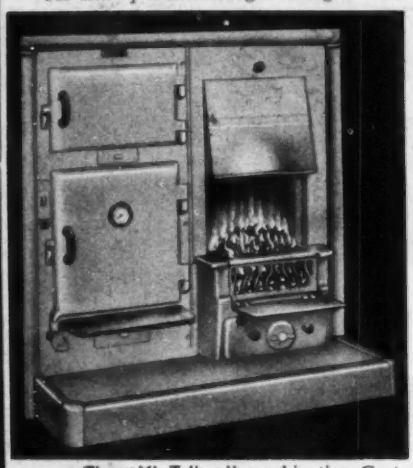

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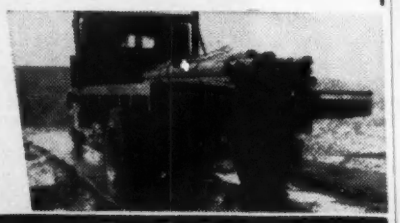

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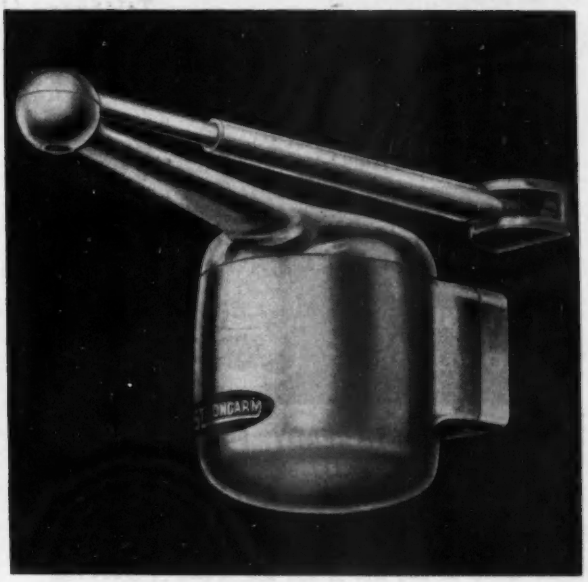

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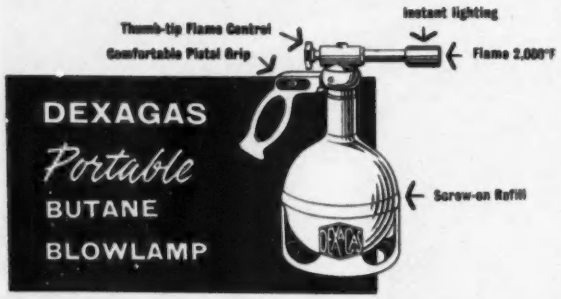

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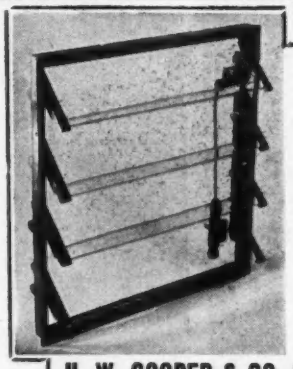

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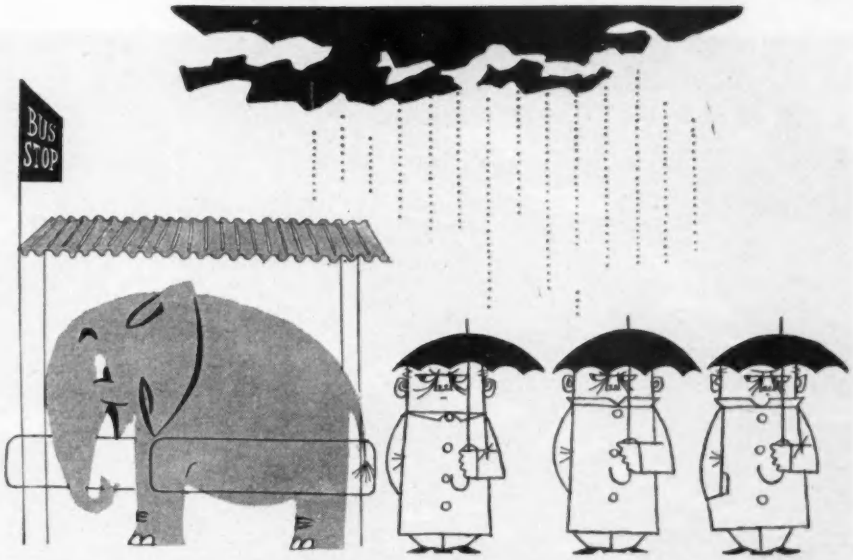

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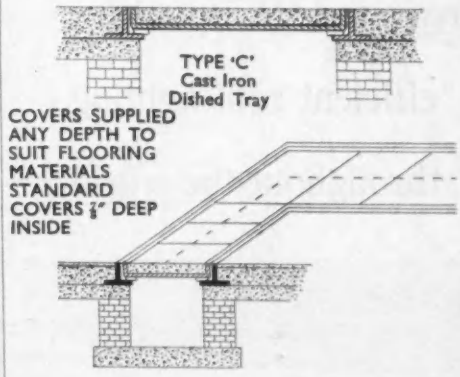

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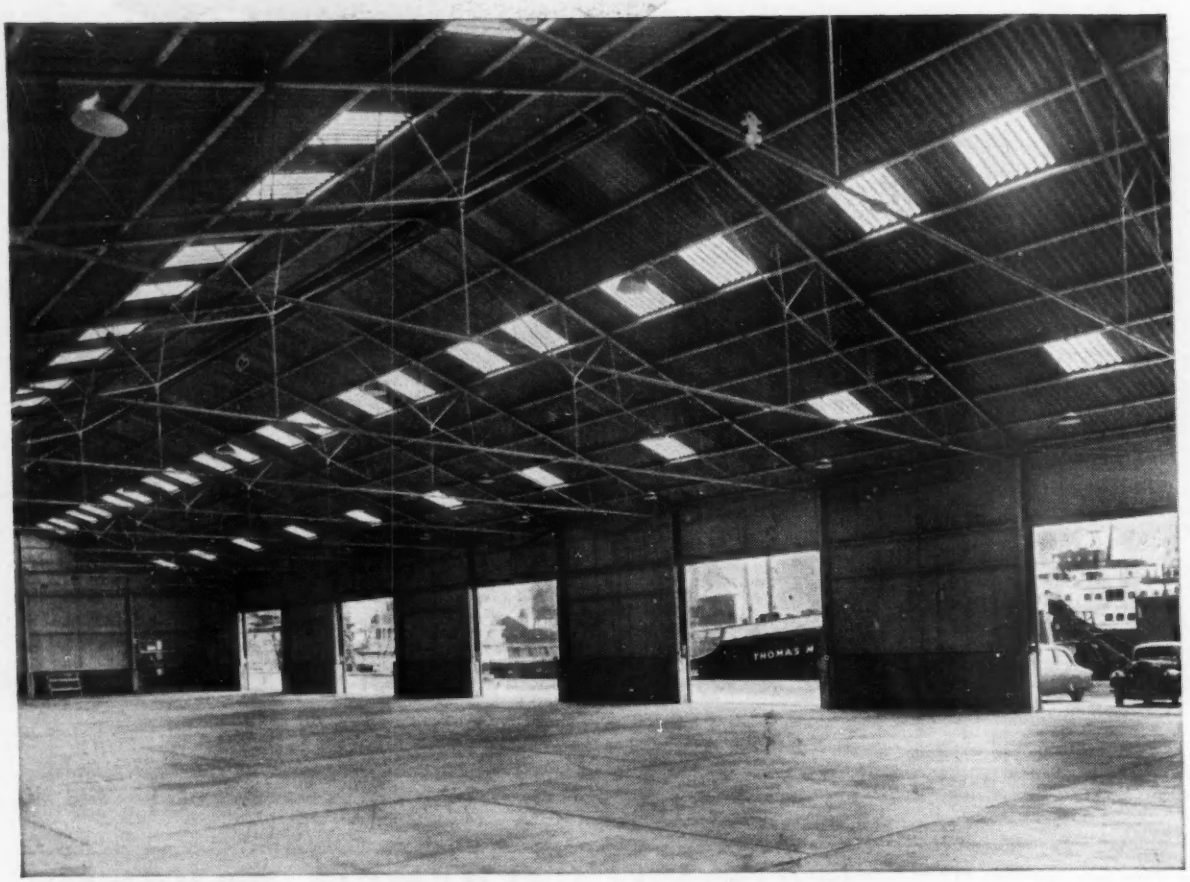

'Arcon' 75 foot span transit building supplied by Taylor Woodrow (Arcon) Ltd., for Dover Harbour Board, Dover, Kent, in which Clear Corrugated 'Perspex' sheet, type 568, has been used for the roof lighting. Consultants: Coode & Partners.

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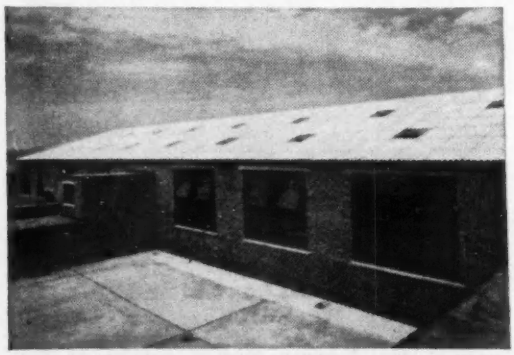

'Arcon' 66 ft. 8 in. span factory building supplied by Taylor Woodrow (Arcon) Ltd., for Bush Radio Limited, Plymouth, in which Clear Corrugated 'Perspex' sheet, type 568 has been used for the roof lighting. Architects: Fuller, Hall & Foulsham.

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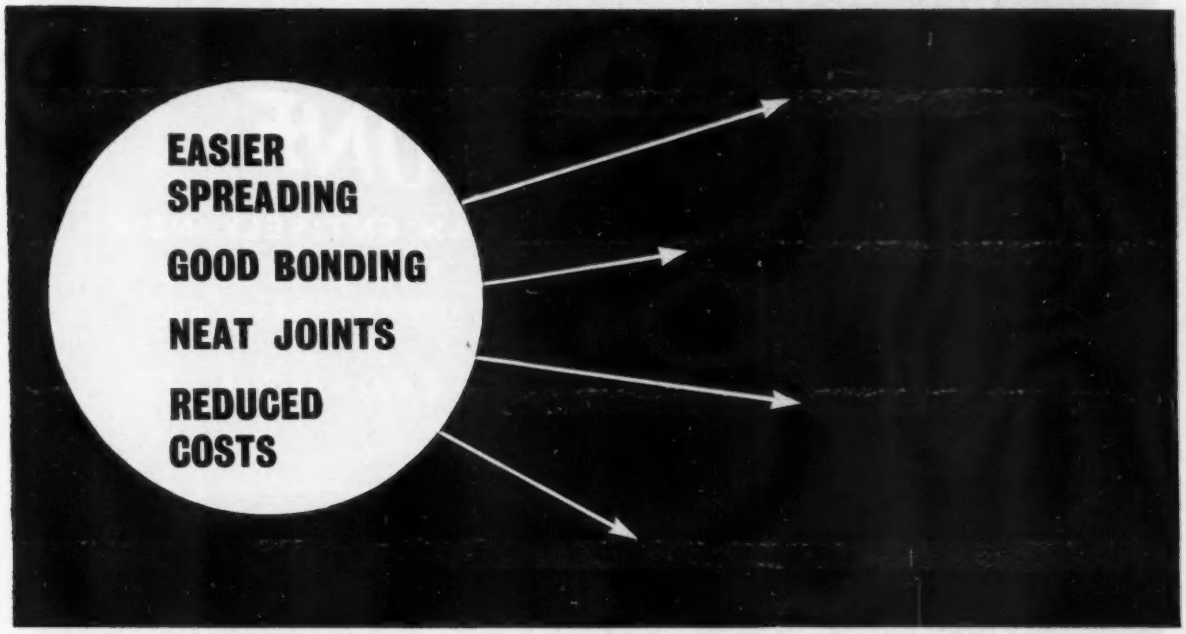

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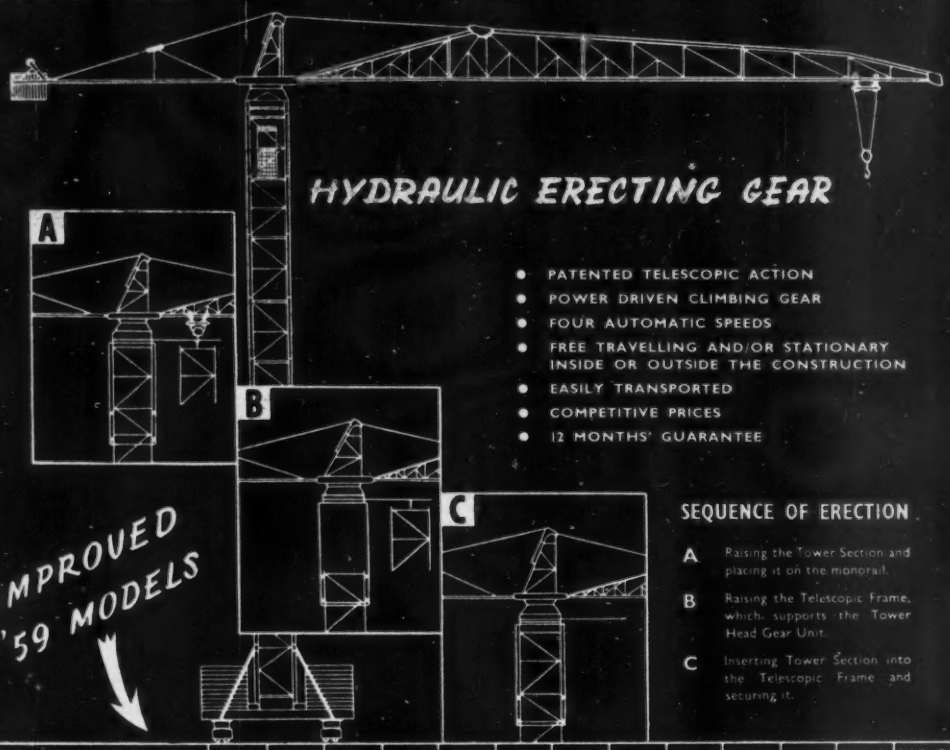

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Radius	34 ft.	49 ft.	66 ft.	72 ft.	66 ft.	82 ft.	92 ft.	66 ft.	82 ft.	99 ft.	66 ft.	82 ft.	99 ft.
S.W.L. at maximum radius	8 cwt.	12 cwt.	14 cwt.	12 cwt.	30 cwt.	20 cwt.	15 cwt.	50 cwt.	30 cwt.	20 cwt.	60 cwt.	40 cwt.	30 cwt.
Maximum S.W.L.	10 cwt.	24 cwt.	50 cwt.	50 cwt.	60 cwt.	60 cwt.	60 cwt.	100 cwt.	100 cwt.	60 cwt.	120 cwt.	120 cwt.	60 cwt.
Maximum S.W.L. Radius	28 ft.	24 ft.	24 ft.	22 ft.	36 ft.	33 ft.	29 ft.	36 ft.	29 ft.	40 ft.	35 ft.	31 ft.	56 ft.
Height under hook "free travelling"	40 ft.	89 ft.	100 ft.	100 ft.	135 ft.	135 ft.	135 ft.	135 ft.	135 ft.	135 ft.	120 ft.	120 ft.	120 ft.
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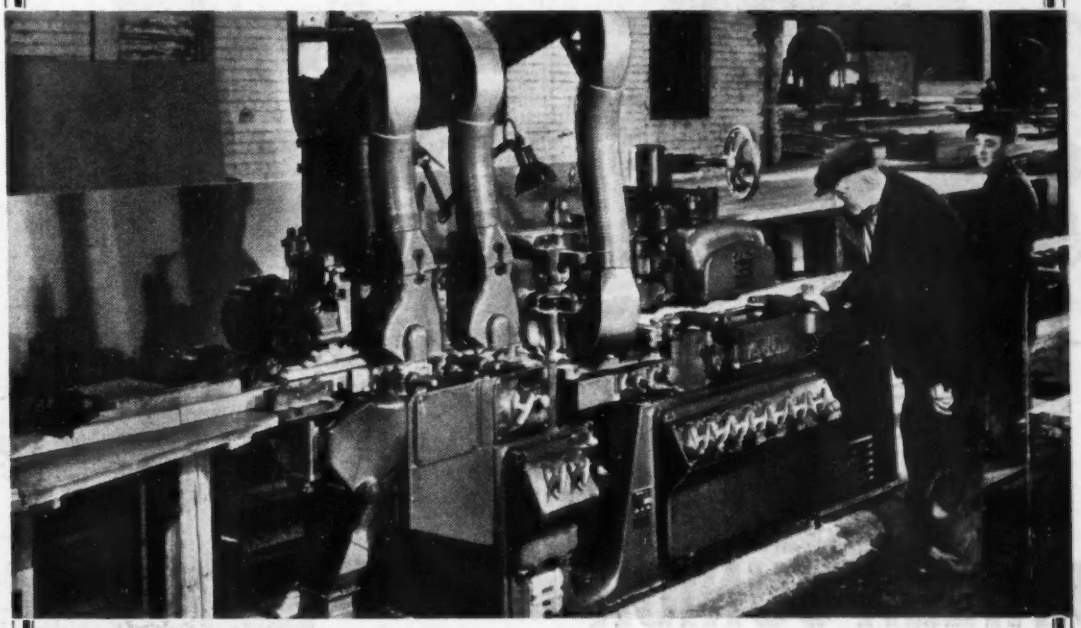

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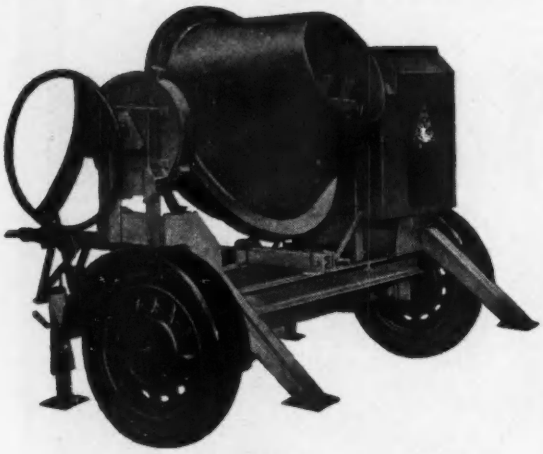

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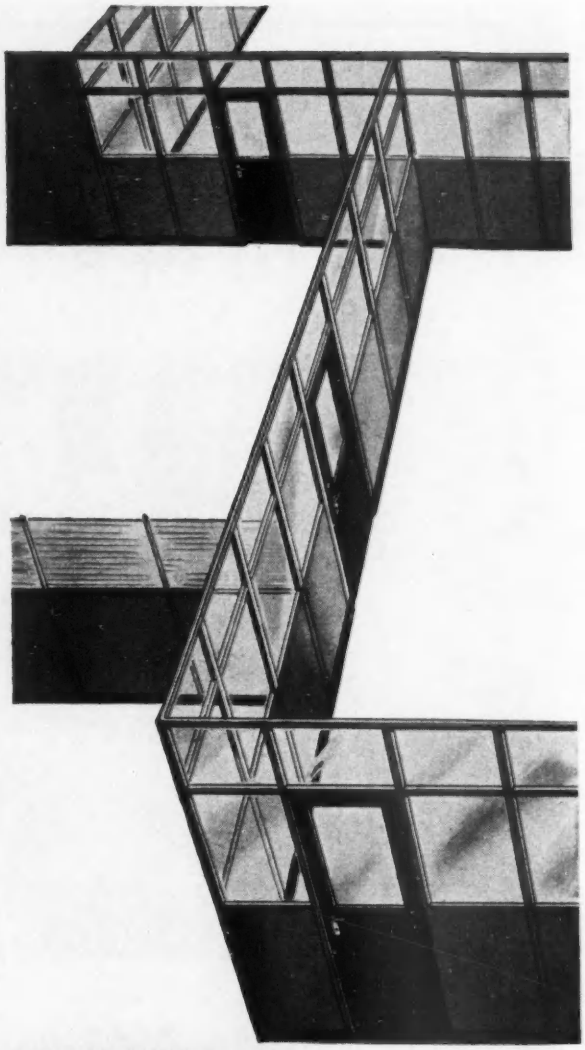

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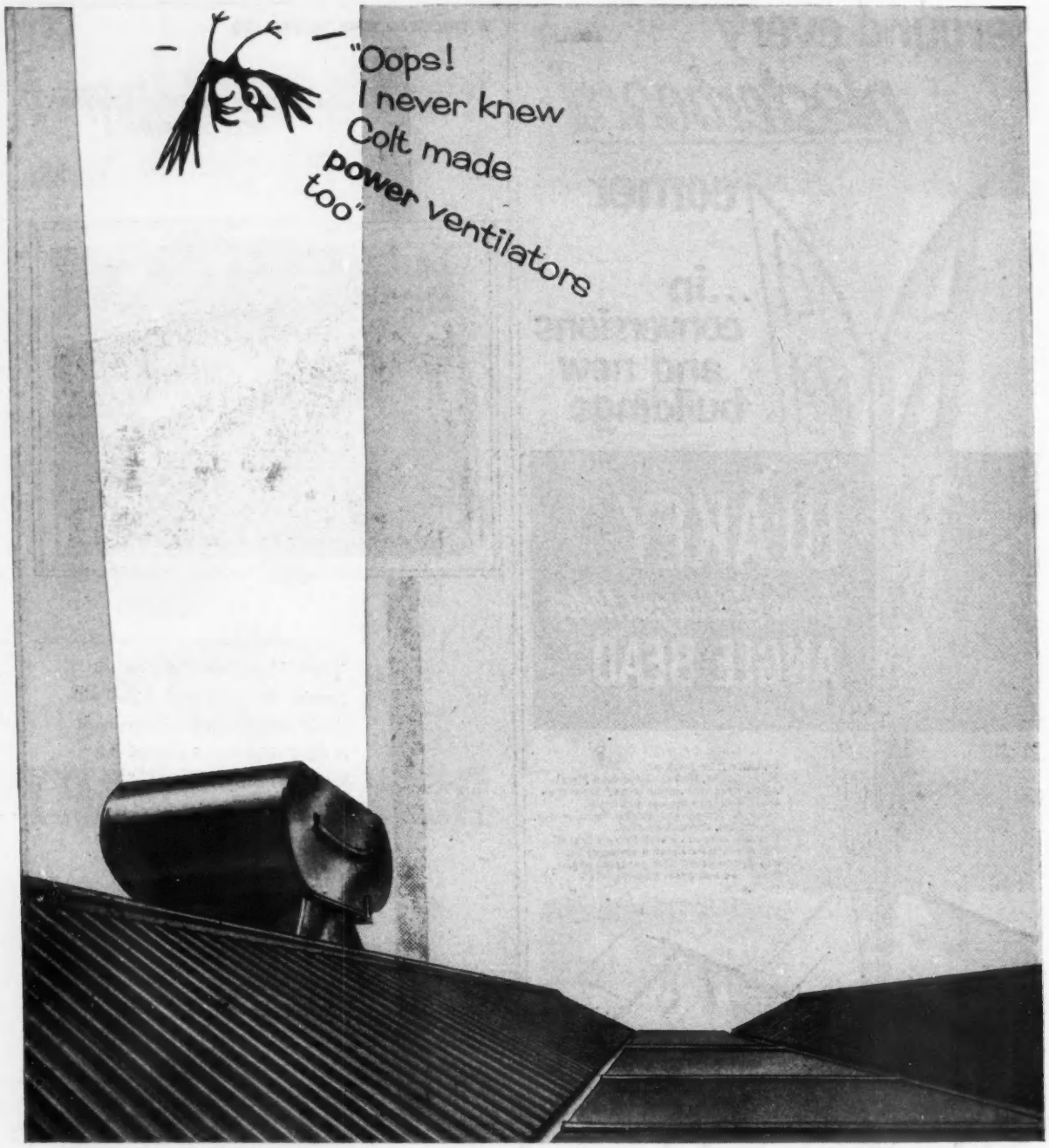

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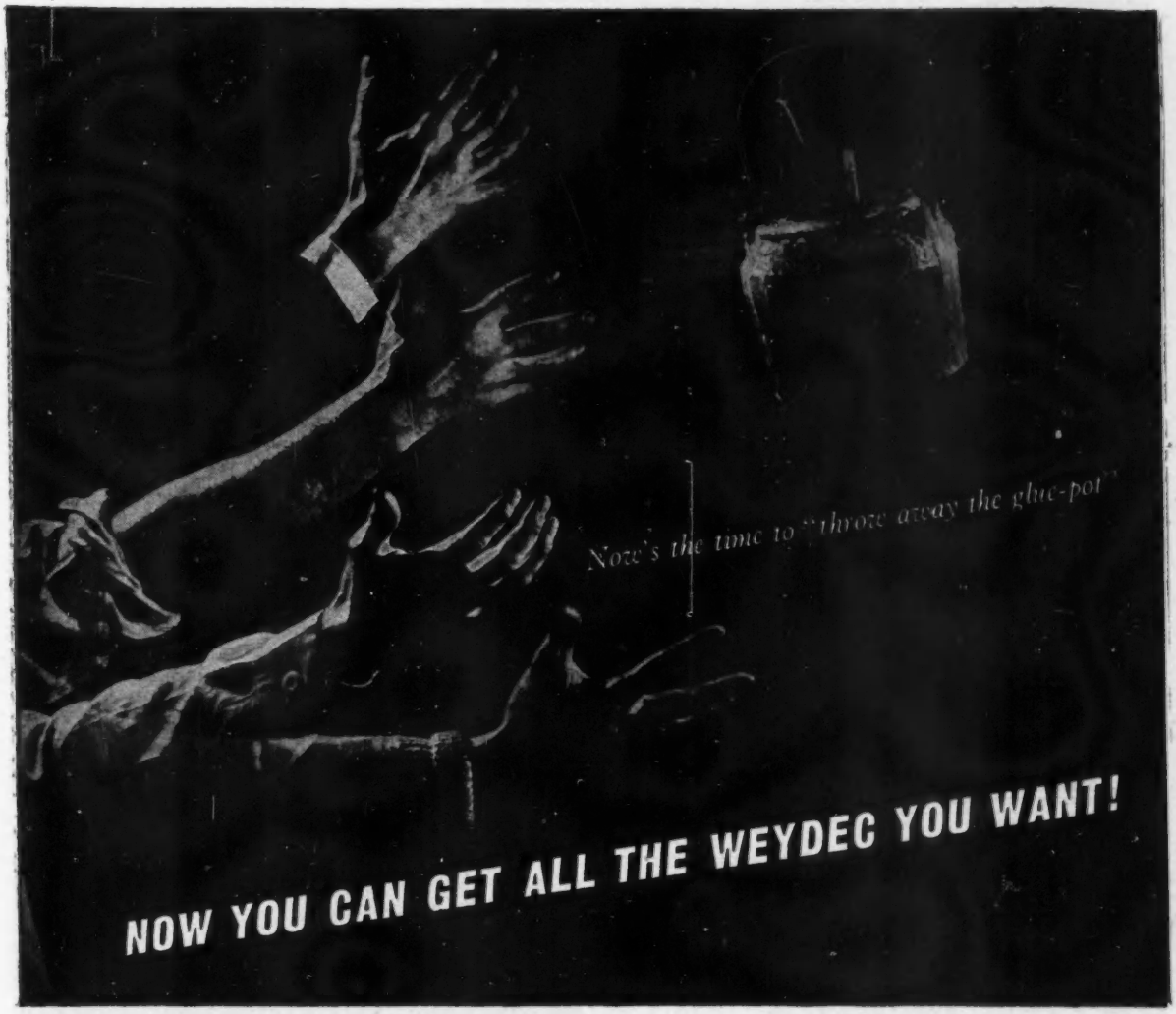

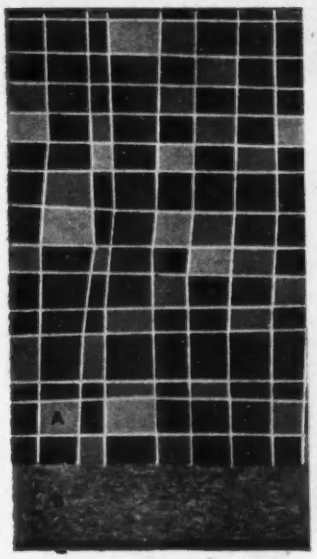

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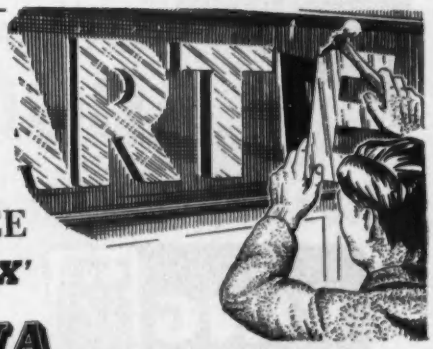

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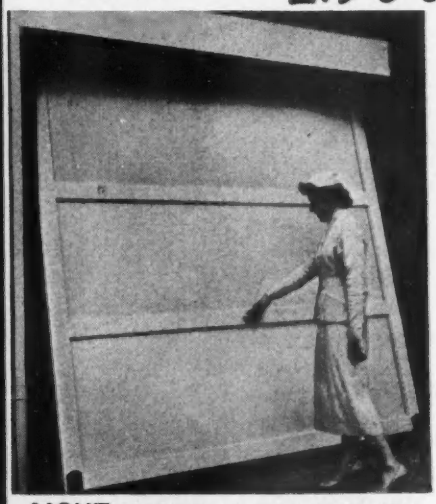

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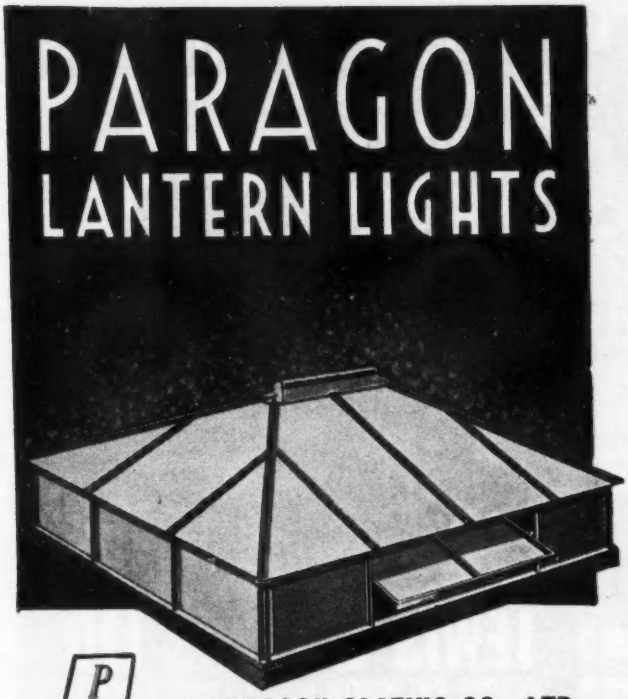

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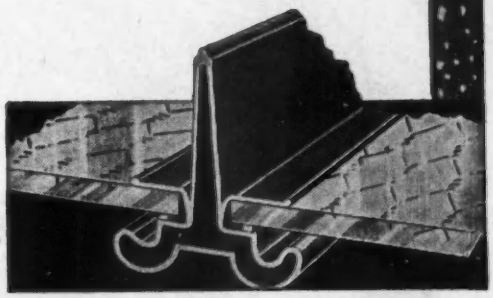

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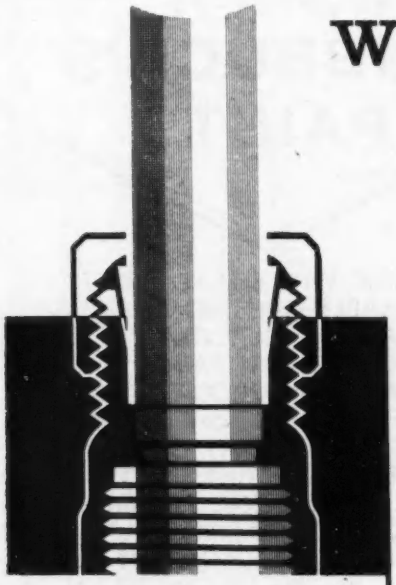

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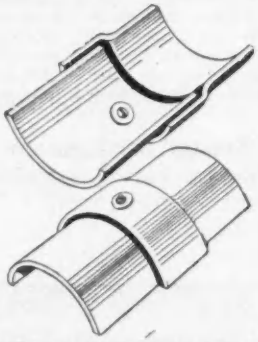

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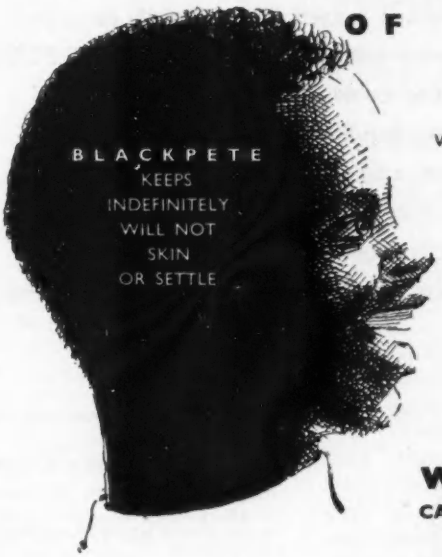

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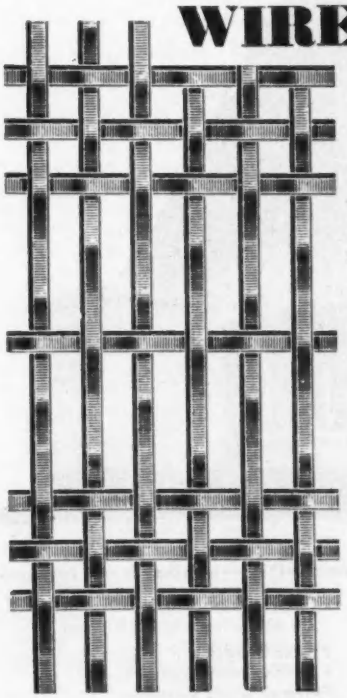

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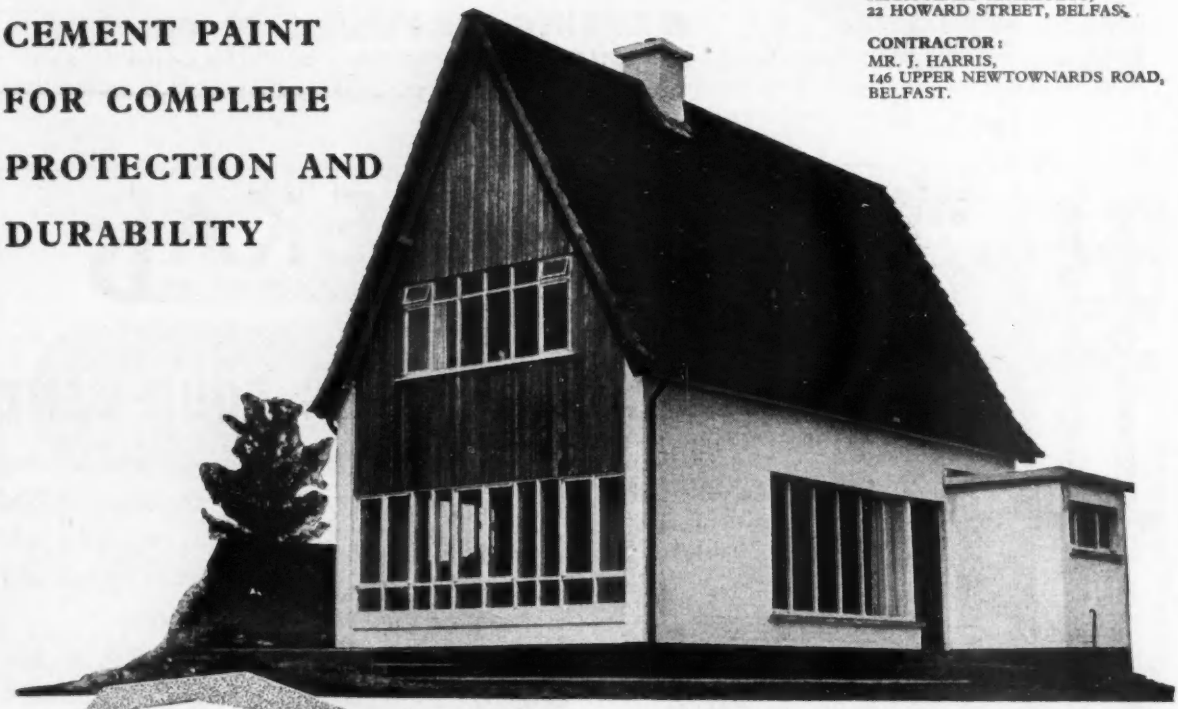

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Builder

INCORPORATING ARCHITECTURE & THE BRITISH ARCHITECT

Vol. CXCVIII. February 26th 1960 No. 6093

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News

Summary

401 *Comments on the fact that architects' salaries, as shown in the Royal Commission's report on Medical Remuneration, are lowest of all the professional classes, are issued by the RIBA.*

402 *New principles for the guidance of its officers in approving the design of staircases and lifts in very high buildings were agreed by the LCC.*

404 *The winning and other premiated designs in the architectural competition for a Shopping Centre at Grangemouth are illustrated.*

411 *Appointment of senior staff, to form a nucleus for a larger group, is announced by Edinburgh University's Housing Research Unit.*

411 *Ways of speeding up the machinery for dealing with planning applications are under consideration by the Minister of Housing and Local Government.*

412 *Architectural and engineering planning aspects of protection during nuclear war will be the subject of two seminars at Pennsylvania State University.*

415 *In placing contracts for construction work the Minister of Works 'does not consider that advertising for an unlimited number of tenders is a satisfactory system,' his Parliamentary Secretary told the Commons.*

417 *A further conference on cost control at the design stage is being arranged, at Nottingham University, by the Cost Research Liaison Committee of the RIBA and RICS.*

435 *The value of overseas contracts for which British engineers were responsible reached £630m. in the last 12 months, an increase of £80m. over the previous year.*

'Late News' will be found overleaf, and 'News of the Week' on page 409.

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No Restrictions, Please!

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If the productivity of building labour goes on rising at the rate achieved since the middle of 1958, an increase of work of (say) 10 per cent would need about 4 per cent more workers—in number rather fewer than those registered as unemployed, and behind the unemployed there stands a considerable reserve army of Irishmen. But, of course, any such general balance will normally conceal a surplus of labour in some areas, and a shortage in others. A shortage of building labour arising in an area already short of labour in general might cause an inflation of earnings and costs which would do nobody very much good. The chances that such shortages will be serious are clearly increased if one takes a pessimistic view of the chances of further rises in productivity; and it may be that (again, in certain areas and for certain types of building) shortages of materials will cause confusion and delay and interrupt the rise in productivity.

But let us keep a firm hold on common sense. There is a great deal of urgently needed building and construction work to be done. A richer economy can quite properly put things like the modernisation of roads and

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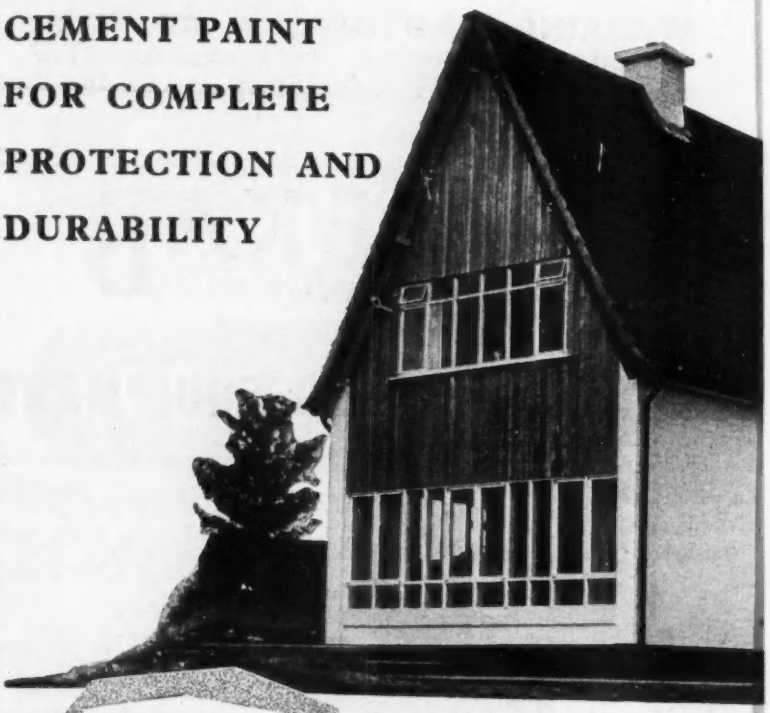

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Late News

Competition for Hospital, Boston

CONDITIONS WILL BE AVAILABLE on and after March 18 for an architectural competition proposed by Sheffield Regional Hospital Board for a new hospital for 474 beds at Boston, Lincs. The competition, to be assessed by Mr. J. Murray Easton, FRIBA, will be a two-stage one with six architects admitted to the final stage. The competition will be open to architects resident in Great Britain, Northern Ireland and Eire. Full details will be given in 'The Builder' of March 18.

College of Advanced Building

SPEAKING at the annual prizegiving of the Department of Architecture, Surveying and Building of the Northern Polytechnic on Tuesday night, MR. BRIAN ROBERTS, MA, chairman of Governors, said: 'There is much talk at the moment of the establishment of a College of Advanced Building Technology, obviously an admirable idea in itself. The Minister of Education has spoken to the Institute of Builders of a new college to cost £1m.

'We at this Polytechnic, with our School of Architecture pre-eminent both in size and in the quality of its work (and such a school must be the basis of the new College) think that we have the strongest possible claim to the establishment of the college here. However, should the decision be taken to establish it elsewhere, as appears at least possible, we at the Northern Polytechnic would not fear its competition provided we were given fair play in the matter of equivalent status for our Department of Architecture, Surveying and Building.

'I just want to say, both as a statement of plain fact and as an amicable warning to our friends both at County Hall and at the Ministry, that the Governing body and I, as chairman, are completely and entirely determined to see that we do get fair play and that we are prepared to make intolerable nuisances of ourselves unless and until we get it.'

The occasion was the last prizegiving to be attended officially as Head of Department by Mr. T. E. Scott, CBE, FRIBA. He will be succeeded on April 1 by Mr. C. Bath, FRIBA, AMTPI.

Architects for Steel Works

RICHARD THOMAS AND BALDWINS LTD. have appointed Sir Percy Thomas and Son, of Cardiff, in association with Gollins, Melvin, Ward and Partners, of 15 Manchester-square, W1, as joint architects for the company's new Spencer Works at Llanwern, near Newport. The plant, in its initial stages, will produce 1,400,000 tons of ingots per annum for conversion into flat rolled steel products.

The Builder

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No Restrictions, Please!

THE RECENT RISE IN BANK RATE, and various hints which have been dropped by eminent persons like the Governor of the Bank of England, are bound to revive fears that some action to restrict new building is in the mind of the Government. The latest issue of the authoritative 'National Institute Economic Review,' though considering that in general the capacity of the economy can provide for a further 4 per cent increase in demand in 1960, speaks cautiously of 'some overload on parts of the building industry' and of the need for 'measures to check specific types of demand that are clearly becoming excessive . . . Measures to overcome these specific obstacles,' the *Review* states, 'can increase the scope for expansion and reduce the risk that general measures of restraint will be needed later.'

The evidence put forward in support of the idea that the industry may become overloaded is as follows: factory building has clearly turned upwards, though the increase will be slow; building for the distributive and service trades is likely to show a moderate rise; and although public investment other than housing may be levelling out, the volume of housing work in 1960 should (unless limited by a shortage of bricks) be 10 per cent above 1959. This is all very vague, but it would certainly seem likely that the increase in the load on the industry will be greater than the expected average for the economy of 4 per cent. The output of the industry, which was fairly constant during 1956, 1957 and 1958, rose about 10 per cent in 1959. What are the possibilities of a further increase, and would that increase harm the economy?

If the productivity of building labour goes on rising at the rate achieved since the middle of 1958, an increase of work of (say) 10 per cent would need about 4 per cent more workers—in number rather fewer than those registered as unemployed, and behind the unemployed there stands a considerable reserve army of Irishmen. But, of course, any such general balance will normally conceal a surplus of labour in some areas, and a shortage in others. A shortage of building labour arising in an area already short of labour in general might cause an inflation of earnings and costs which would do nobody very much good. The chances that such shortages will be serious are clearly increased if one takes a pessimistic view of the chances of further rises in productivity; and it may be that (again, in certain areas and for certain types of building) shortages of materials will cause confusion and delay and interrupt the rise in productivity.

But let us keep a firm hold on common sense. There is a great deal of urgently needed building and construction work to be done. A richer economy can quite properly put things like the modernisation of roads and

railways, and the clearance of urban blight, high on its list of priorities; and this implies that the constructional industries may need to expand faster than the average. The object of planning, therefore, might well be to restrict *other* industries so that construction can increase; at the very least, there is no excuse for stopping the industry from doing as much as it can with its present resources.

There is good ground for resisting any attempt to apply general national controls. The problem, if it exists at all, is local and confined to particular sections of the industry. There is no sense in cutting back building in Glasgow because you think it needs to be cut back in Birmingham, or in having heavy road-building plant unemployed because of a shortage of bricks for house-building. In particular, there is no sense in attempting a general restriction by credit control and higher interest rates, for these measures will have a delayed, uncertain and generalised effect, when what is wanted is an immediate and local effect. (There are, of course, conditions when credit restriction is necessary; but at present it cannot be justified *for this purpose*.)

At the same time the industry must be relentless in stepping up its efficiency. 'You must build more each year without increasing unit costs since, if they do increase, this will contribute to an inflationary situation which the Government could not ignore.' This advice, given by Sir David Eccles at the Institute of Builders' dinner last week, is wise, and his concluding remarks should be noted: 'There is a danger that the building industry is bound itself to be a brake on the whole economy unless management and training are rapidly and confidently improved.'

Perhaps the best advice to offer to the Government is that they should let the industry see what it can do with its present resources; and, when localised shortages or rises in costs appear (but not before) that these should be dealt with by local measures. For instance, if public authorities in areas of shortage were firm in refusing to tolerate higher tender prices or long delays, and preferred to cut down their programmes until easier conditions returned, they would do much to bring those easier conditions quickly. It is reasonable to try to avoid a rush of orders, placed in an effort to beat a shortage which has already appeared. But it seems premature to be interrupting continuity of planning and the even flow of building and civil engineering work to deal with inflationary conditions which may never arise.

Notes of the Week

Architectural Competitions; Architects' Remuneration; St. Catherine's College; 'Wages Award a Challenge'; The I.o.B. Dinner; Architects at the 19th Hole

'SO THICK AND FAST, they come at last': if we remember the poet we forget the occasion, but the phrase well suits a moment when no fewer than eight architectural competitions for schemes in the United Kingdom or Eire are open, and several more are imminent. Three of these are for buildings proposed for Scotland, a country in which a fourth competition result has this week been declared in the shape of a scheme of shops and flats at Grangemouth. (This last, by the way, must capture the record for prompt assessment as well as speedy organisation of the competition itself—on which both the Burgh authorities and Mr. Grenfell Baines must be congratulated: the winning designs are published in this issue.)

This spate of contests is the more welcome by reason of the poor reception accorded to some competition results of the last few years which produced suggestions ranging from the banning of competitions for a two-year period to a cry for more two-stage affairs. It is not without interest to note that of the ten competitions listed in this issue, only two are of the two-stage type and only one (for the WHO headquarters building, Geneva) is limited to a selected number of entrants.

* * *

OF THE COMPETITIONS NOTED none is more interesting potentially than that for the redevelopment of 49 acres of the central area of Dumbarton on a 'primarily commercial' basis. The conditions of competition being newly issued, the precise contribution which competitors are asked to make remains uncertain, but it could be that this may be an experiment on the lines recently recommended to its competitions committee by the RIBA Council. The wisdom or otherwise of architects designing in the dark for unknown clients was debated in a leading article on January 22 and further comment can await study of the conditions of competition which Professor Robert Matthew is to assess.

Architects' Remuneration

THOSE WHO HAVE NOT STUDIED the recent report of the Royal Commission on Doctors' and Dentists' Remuneration may be surprised to find that the architect comes bottom of the scale of professional earnings. The RIBA has been quick to react to this, and has posed (in a statement printed on page 401 of this issue) some questions which architects however employed will do well to ponder. As the statement truly says: 'The report is likely to serve as a sharp thorn in the flesh of the various committees of the Institute that are considering these problems, although much more in the way both of fact-finding and heart-searching will be needed before either they or the profession at large find the answers—or indeed can interpret this report satisfactorily.'

Meanwhile, with a nice sense of timing, a group of technical staff employed in the Barnsley Borough Engineer's office have written to their local branch of NALGO to put their case for better staffs and adequate salaries to compensate for years of study and eventual qualification. Their case is very fairly argued (the letter is reprinted in this issue) and could no doubt be put equally cogently by many other salaried assistants.

St. Catherine's College

THOUGH CHURCHILL COLLEGE at Cambridge has beaten it to a start, we gather from Mr. Alan Bullock, the Censor of St. Catherine's Society and Master-designate of the proposed St. Catherine's College, that the Society is pleased with the plans produced by Arne Jacobsen. Site work is to start this year and present hopes are for the college to open with 80 or more freshmen in October, 1962; Mr. Bullock hopes to publish the plans in the summer. Financially, the new foundation continues to do well, and a recent gift of £50,000 brings the total given so far for the building and endowment of the college to over £1½m.

Arne Jacobsen has currently and simultaneously been engaged in preparing a design for the limited competition for new headquarters in Geneva for World Health Organisation, for which Sir Howard Robertson is one of the assessors.

'Wages Award a Challenge'

MR. WOODBINE PARISH'S ADVICE to the LMBA Council (see page 416) that builders should regard the recommended wage settlement as a challenge to keep costs steady and should find means, by way of improved organisation and methods, to absorb a surcharge on labour costs which he estimates at 4 per cent, may meet with a mixed reception from builders. Can the industry 'swallow' a wages award which adds, in round figures, about 2½ per cent to the cost of building? It is difficult to see how it could come out of profits without further weakening firms' ability to re-tool themselves. Could it, as Mr. Parish suggests,

be achieved through better management and improved methods? We should say, Yes, but that this efficiency must extend right through the industry, including the architectural profession and the operatives. The particular contribution of the architects is, of course, in organising contract building—a department of the industry where, in the opinion of a leading builder, something of the order of five to ten per cent of the total cost could be saved by full planning before the start of the job. The operatives' contribution can be made right through the scale, from large-scale construction down to jobbing work, where the full brunt of wage increases will be felt. The operatives, to their great credit, have stepped up their productivity (as was demonstrated by Professor Carter in his last quarterly article on Prices and Productivity: 'The Builder' of January 29) but they, as indeed every branch of industry, must continue the process. Mr. Parish's remark that 'if we as a nation are unable to offset increased earnings by increased productivity, then we have nothing to look forward to other than progressive inflation' should be displayed on every site—and in every office. This is, indeed, a presidential lead!

HRH The Duke of Edinburgh seen speaking at the opening of the 'Creative-Craftsmanship' Exhibition at the RIBA on February 17. *(See p. 412.)*

Requiem Mass for Sir Giles

REPRESENTATIVES FROM EVERY WALK OF LIFE with which he had come into contact were present at St. James's, Spanish-place, on February 17, for the requiem mass for Sir Giles Gilbert Scott. The Queen was represented and there was a very large muster of friends from the Royal Academy, his brother architects, representatives of the arts in many forms, quantity surveyors and builders, and others associated with building. Magnificent male voice singing added to the impressiveness of an occasion where so many were met in a tribute of affection to a great and kindly man.

* * *

ST. JAMES'S, not easy of access, is a church less well known than it should be. The Gothic interior, thought by some to resemble Worcester Cathedral, is very fine in detailing and in scale; it was for many years under the care of the late H. S. Goodhart-Rendel. The name of its designer eluded several of the distinguished architects present at the service; it was the Victorian architect Goldie, who died in 1887 and whose only other recorded work is St. Wilfrid's, York.

Architects at the 19th Hole

REFERENCE WAS made in obituary notices last week to the abiding interest in golf retained by Sir Giles Scott to the end of his life. This fact was recalled at the annual dinner on Friday last of the RIBA Golfing Society of which he had, since 1932, been the first and only President. Until the last year or so, he had hardly ever missed a match or a meeting, as Mr. Duncan Scott, the society's captain, said in tribute. The society, as was mentioned by Mr. Ian Leslie in proposing its health and that of its captain, started life in 1923 as the AA Golfing Society and, following some set-backs, was reconstituted under its present name in 1932. Nowadays, five matches are played each season, mostly against other clubs connected with the industry, and there are three annual meetings. Mr. Leslie complimented the society on the spirit in which its matches were played and also on its good fortune in possessing such admirable honorary officers in the shape of Mr. Steve Statham, secretary, and Mr. Felix Wilson, treasurer. Excellent speeches built round the Guests, by Mr. F. T. Smith and Mr. W. F. Ames, rounded off an evening which the seventy members and guests present greatly enjoyed.

Post Open at Birmingham

AN IMPORTANT POST is currently advertised as being open at Birmingham, where the City Architect, Mr. A. Sheppard Fidler, is seeking a Deputy following the appointment of the present holder, Mr. J. R. Sheridan-Shedden, as Leeds City Architect. Birmingham has a tremendous programme of interesting architectural work in hand and on the drawing board, including a large exhibition building, a 14-storey office block, a college of art and a teachers' training college. With a salary range of £2,870 to £3,370, the Deputy Architect's post is one of the major appointments in the country and offers an opportunity to make a real contribution to civic architecture.

Poet's Corner

Professor Robert Matthew in a recent address suggested that higher buildings in London are inevitable.

Some people, 'tis said, deprecate the desire
of the London CC to build higher and
higher;
And hope those who favour this 'tall buildings' farce'll stick 'em all up round the
Elephant and Castle.

ANON.

Institute of Builders' Dinner

THE DINNER of the Institute of Builders is rapidly gaining the reputation of being an event of the year. The current banquet, held in Guildhall last week, was notable for a record attendance (part of which had to be accommodated in an anteroom fitted with closed television) and for some excellent speeches of which those by Sir Dermot Boyle and Sir David Eccles, Minister of Education, were, perhaps, outstanding. It was particularly apt that Sir David should have been present after a gap of two years, to report progress on the present state of the College of Advanced Building Technology which he officially 'floated' when Minister of Education in the previous administration. It was a disappointment to him and to the company present that he was unable to name the place and the day, but it is a fairly open secret that a full announcement will come shortly.

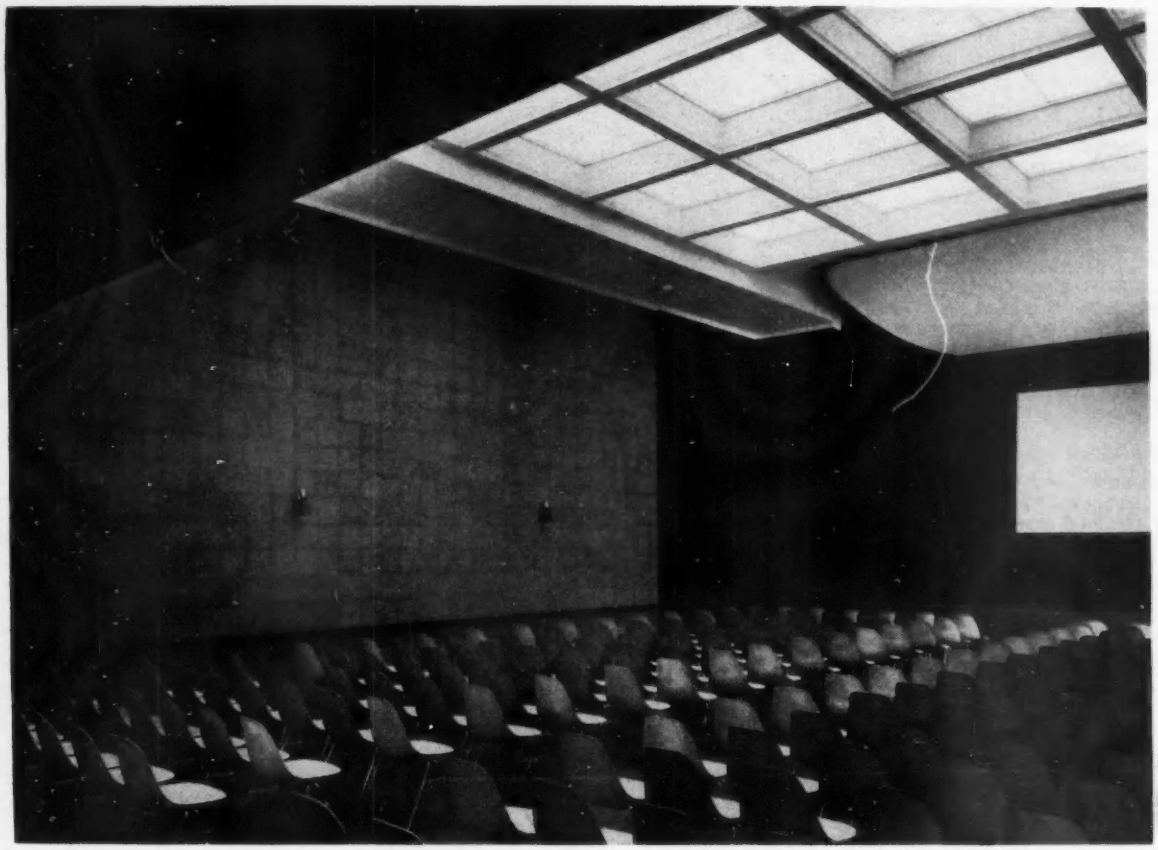
That Sir David retains his interest in the building industry was abundantly demonstrated in his speech. This is dealt with in its economic implications in a leading article; here it may be said that it was received with the close attention it deserved. The President, Mr. Swayne, reigned with dignity.

Traffic Study Group

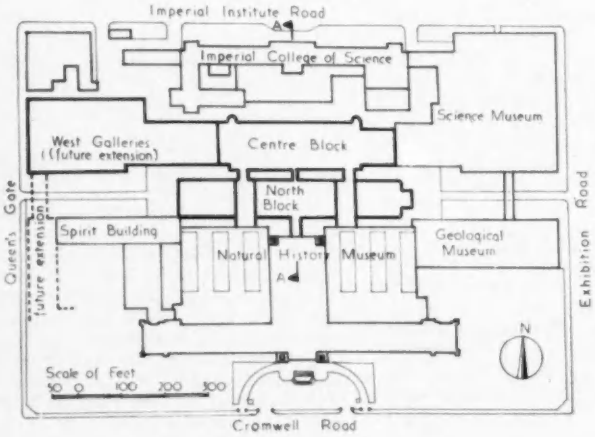
MR. ERNEST MARPLES, Minister of Transport, announced in London on Monday that he is setting up a long-term study group to probe into the future of our cities in the motor age. Among the points that the study group would consider was that future buildings must provide for the off-street car parks their own cars would need. Mr. Marples was speaking at the opening of Castrol House, Marylebone-road. We commend this fresh evidence that the Minister is tackling this problem with energy.

Extensions to South Kensington Museum

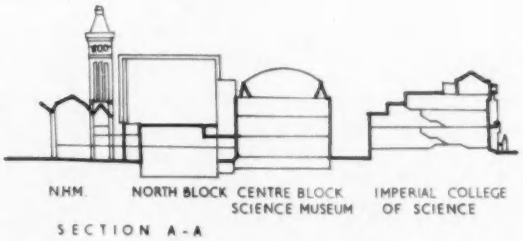
By The Ministry of Works



Lecture theatre, looking toward stage and adjustable proscenium



General layout and cross section of the museum area, showing the scope of the work and ultimate massing of the present and future extensions. Plan, scale 352 ft. to 1 in. Section, scale 176 ft. to 1 in.



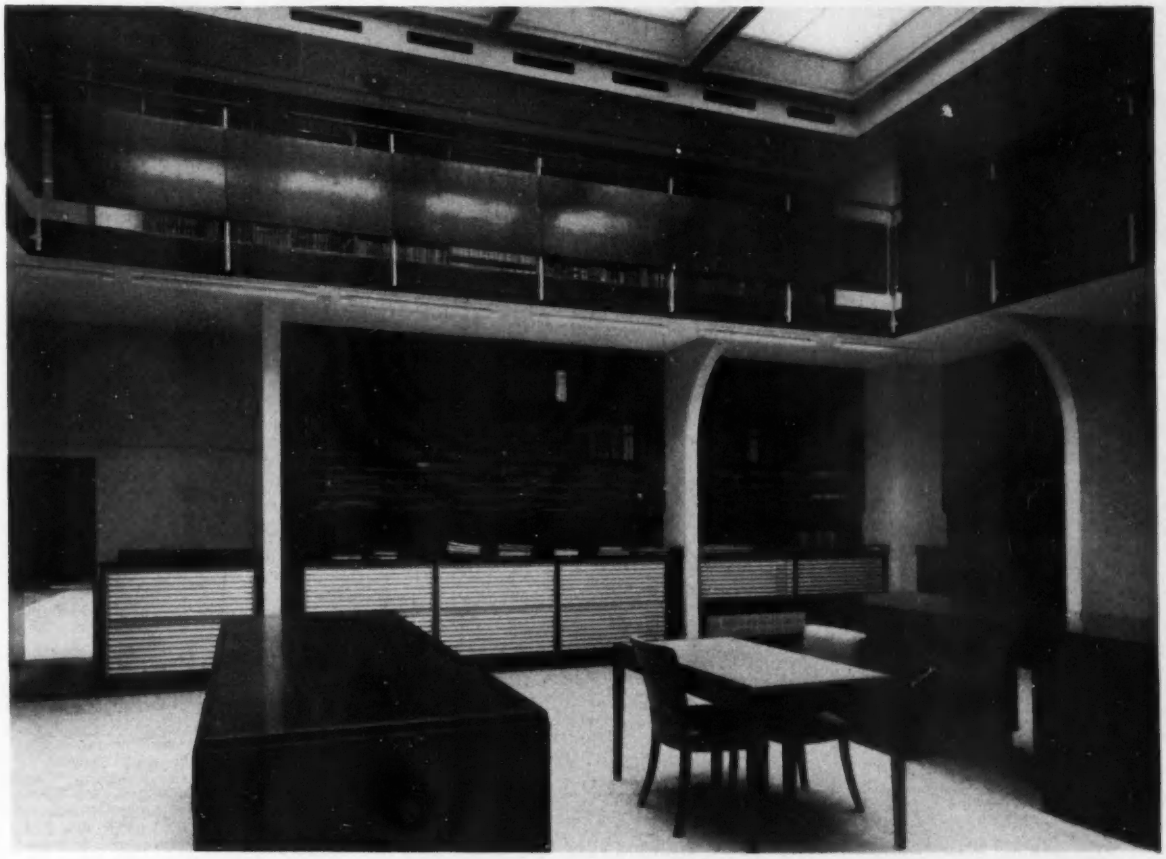
W. KENDALL, ARIBA, senior architect, MoW

V NOBLE, AMIMECH.E, senior engineer, MoW

N. P. GOLD, ARICS; D. L. DEANS, senior quantity surveyors, MoW

BLARE, LEANING & BLARE; CROSS & HALL, quantity surveyors

A. ROBERTS & CO. LTD., general contractors (north block); Y. J. LOVELL & SONS LTD.. general contractors (centre block); HAYMILLS LTD., general contractors (boiler house)

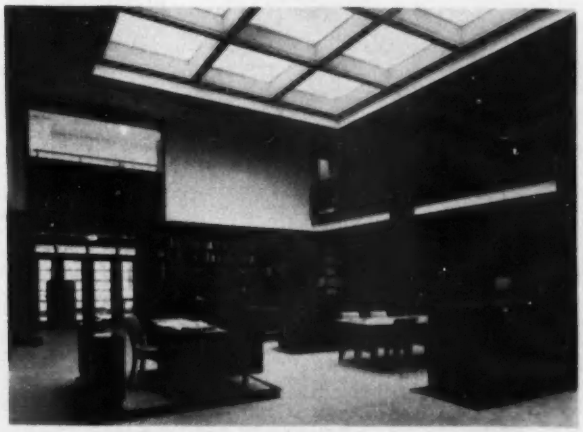


The north block map room. Below, the library

THE EXTENSION of the Natural History Museum, illustrated in these pages, forms one stage of a comprehensive development plan for South Kensington Museum as a whole. The scheme is being carried out in five phases: (1) basement and ground floor of the central Science Museum block, which was temporarily roofed in 1950 for use as a Festival of Britain exhibition hall; (2) new boiler house to serve the whole museum area, completed in 1956; (3) stage one of the north block Natural History Museum, completed in 1958; (4) completion of the centre block on which work is now proceeding; (5) stage two of the north block for which a starting date is not yet fixed.

Stage one, of the north block, contains the scientific collection of mammals, a library and map room, lecture hall, offices, laboratories and stores, additional exhibition space for the whale room, and the new boiler house, plant room, and engineers' quarters. These are grouped in an oblong block, in part up to 9 storeys high. Stage two will extend eastwards and includes a second tall block.

The structure is steel framework at the lower floors, on a



Durasteel enclosed staircase

Cabinet storage system

Extension to South Kensington Museum

Control room and public platform, boiler house

3 ft. 4 in. module. A concrete raft at 2nd floor receives cruciform steel columns of the upper storeys. The museum reference collection is housed in storage cabinets which are carried by these 4 in. x 4 in. cruciform columns set between the units.

Floors are of light steel decking with lightly reinforced concrete topping and lino finish. Soffits are fire-protected by asbestos board.

The lecture hall has seating for 240. Walls are finished with cork tiles and the ceiling is acoustic tile and fibrous plaster.

The boiler house, designed as a 'live exhibit' of the Science Museum, serves a very large district heating scheme, which takes in the Natural History and Science Museums, Albert Museum, Geological Museum, Imperial College of Science and its large future extensions. The boiler chamber is a concrete structure measuring 117 ft. x 52 ft. x 30 ft. high, containing 3 boilers and space for a fourth.

The ceiling is suspended wood wool slabs left untreated. Between the sub-ceiling and structural slab, fresh air is drawn by fans down to the boilers, and this action provides a heat barrier between the boiler and superstructure. The fuel is creosote pitch, giving smokeless combustion and maximum efficiency.

Estimated cost of the north block (excluding stage 2) is £525,000, and boiler equipment and mains, £225,000. The total cost of the centre block will be £950,000.

Sub-Contractors (North Block)

Foundation: Y. J. Lovell & Sons, Ltd.; *Steel frame:* Moreland, Hayne & Co. Ltd.; *drainage:* A. Grant & Sons; *painting:* Dicol Decorators; *tarmacadam:* Chittenden & Simmons; *scaffolding:* Scaffolding G. B. Ltd.; *plumbing:* Henry Tattersall Ltd.; *roller shutters:* Dennison Kett & Co. Ltd.; *vertical asbestos sheeting:* Roberts Adlard & Co. Ltd.; *Travertone acoustic tiling and cork wall surface:* Armstrong Cork Co. Ltd.; *cork slabbing, floors and roofs:* British Cork Mills Ltd.; *glazing:* Aygee Ltd.; *glazing:* Tabor Ltd.; *wall tiling:* Summers & Co.; *suspended ceilings:* Tentest Fibre Board Co. Ltd.; *asbestos spray:* Wm. Kenyon & Sons; *art stone:* Boss & Brady Ltd.; *balustrades:* Grundy Arnatt Ltd.; *motorised blinds:* Deans Blinds (Putney) Ltd.; *steel staircases:* Fredk. Braby & Co. Ltd.; *cement glaze:* John Ellis Ltd.; *reinforcement:* T. C. Jones & Co. Ltd.; *steel decking:* Robertson Thain Ltd.; *patent glazing:* Warners Ltd.; *cinematograph equipment:* R.C.A. Ltd.; *asphalt:* H. V. Smith & Co. Ltd.; *plastering:* F. Greenslade & Sons Ltd.; *durasteel:* Durasteel Ltd.; *fibrous plaster special joinery:* Hamptons Ltd.; *welding:* London Welding Co. Ltd.; *faience tiling:* Shaws Glazed Brick Co. Ltd.; *alum. windows:* A. Beanes & Co. Ltd.; *reinforced concrete:* F. Bradford & Co. Ltd.; *electrical:* Rashleigh Phipps & Co. Ltd; *lifts:* Otis Elevator Co. Ltd.; *air conditioning:* Benham & Sons Ltd.; *marble:* Walter W. Jenkins & Co. Ltd.

Sub-Contractors (Boiler House)

Demolition: R. Ashton & Sons; *excavation:* Willment Bros.; *flues:* W. Neale; *boilers:* La Mont Steam Generator Co. Ltd.; *electrical:* Electrical Installations Ltd.; *heating mains:* G. N. Haden & Sons Ltd.

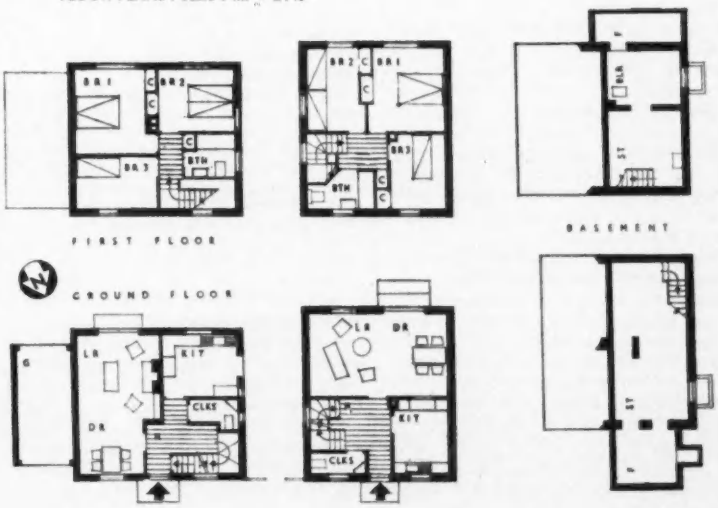
Two Private Houses, Blackheath, S.E.3

DAVID BUSH, B ARCH, ARIBA, architect

G. T. JOYCE & CO., LTD., general contractors

Main frontages facing on to Hyde Vale

FLOOR PLANS : Scale 1 in. = 24 ft



MORE THAN a small part of the charm of Blackheath resides in its steady and unselfconscious tradition of perpetuating the Georgian manner. Each year in this south-east London vale the renewal of the quiet dignity of Georgian proportion goes on, without showing awareness of or perturbation at the boom in structural innovation and frenzy of 'exploded' and other architectural styles proliferating on the west commons of London. 'East is east and west is west. . . .'

This pair of small houses, replacing others destroyed by enemy action, are sited in Hyde Vale on the hillside leading from Blackheath down to Greenwich. The materials are stock facing bricks, and Hardrow concrete slating by Robert Abraham. Windows are EJMA casements with 'Unique' spiral balances. Flooring is hardwood and plastic tiles.

Letters to the Editor

Standardisation and Modular Co-ordination; Technical Staff Salaries; Permanent Employment of Operatives

Standardisation and Modular Co-ordination

SIR,—The leading article in your issue of February 5 was, to put it mildly, an astonishing piece of work. What must have most surprised those of your readers who know something of the set-up of the British Standards Institution was the picture it conjured up of BSI as a behind-the-scenes pressure group foisting its standards on to a reluctant industry. Unfortunately some of your readers may have been misled into thinking that the BSI exerts dictatorial powers, so perhaps you will allow me to clarify the position.

BSI's staff does not on its own responsibility write standards. All British Standards, ever since the first one was prepared in 1901, are drawn up at the request of industry and by the representatives of industry. If the voluntary British system of standardisation has any virtue at all, it is that standards are democratically evolved. The committees which meet to write them at British Standards House include representatives of all the major interests concerned and not, as you suggest, merely a sectional interest; and before their proposals are published as a British Standard they go out for comment to an even wider circle of interests at home and overseas.

Your specific complaint relates to the BSI proposal for a 4-inch module which you say conflicts with the work of the BRS. The point I want to emphasise is that this BSI committee's proposal for a 4-inch module is exactly what it calls itself; a draft standard on which informed comment is welcomed. No objection was raised by anyone on the committee (which includes the Building Research Station) to this step being taken of circulating the draft for comment.

It seems odd therefore that 'The Builder' should now throw up its arms in horror 'to learn that BSI has circulated a draft standard on this subject.' In fact in your issue of May 1, 1959, you kindly included a note about this draft to help us obtain comment. You then said 'On the most important recommendation—that is the size of the module—the committee concerned emphasises that a final decision has not yet been taken.' The position, I assure you, has not changed since then.

So far as your strictures on the International Standards Organisation (ISO) and the European Productivity Agency (EPA) are concerned I can only reassure your readers that the same democratic processes applying to British Standards apply also to the work of these two bodies. In any case the ISO proposal for a 10 cm. (4 inch) module could only be ratified by the United Kingdom if BSI's modular co-ordination committee (the same one that is responsible for the draft British Standard) agreed on its desirability.

This is not the place to argue the actual pros and cons of dimensional co-ordination or of any particular module. But it is probably worth restating that the 10 cm. module is already widely accepted in the metric countries and that the United States and Canada are committed to its 4-inch equivalent.

With so many countries supporting the ISO draft the prospect of the United Kingdom fulfilling a King Canute role is not one to be envied as the prospect of success seems no greater than his.

C. DOUGLAS WOODWARD,
Press and Public Relations Officer,
BSI, 2 Park-street, W1.

'Sally Farmer, 21, milkmaid, no money, face is her fortune, interested in jazz and baroque architecture!'

Technical Staff Salaries

SIR,—On numerous occasions I have observed that your newspaper has touched upon salaries paid to technical staffs. May I appeal to you to put into a proper perspective the position affecting qualified technical staff in local government?

I enclose a copy of a letter that was sent to our local branch of NALGO and signed by twenty members of the Engineer's staff which I think puts our aims quite clearly. Any assistance that you feel you could afford us through the medium of your newspaper would be of infinite help to us in our claims for better staffs and adequate salaries to compensate for years of study and eventual qualification.

H. C. WILLIS [ARIBA],
Chief Assistant Architect, Borough Engineer and Surveyor's Office,
Barnsley.

To: The Secretary,
Barnsley Branch of NALGO

DEAR SIR, It is with some concern that we, as qualified professional technical staff, note that our status is steadily deteriorating by the recent reviews and salary awards. We feel that not enough is being done to reward the skill and technical knowledge which is at the disposal of local councils, and we feel that some recognition of our position should be made more apparent to local councils.

With this in mind we wish for a general revision of the grades for suitably qualified technical staffs, other than the special grades of the Conditions of Service, and we are suggesting the following three grades:

Preliminary: £655 x £35 (4) to £795 for assistants who have completed their initial training and graduates with less than two years' experience.

Technical: £795 x £40 (7) to £1,075 for assistants who are studying for their final professional examination and graduates with more than two years' experience.

Professional: £1,075 x £50 (6) to £1,575 for Chartered engineers, architects, surveyors, town planners, etc., with at least five years' experience.

The wish of the undersigned technical officers is, that this letter should be sent to the National Executive Council of NALGO.

Points in our favour are that a Graduate in civil or municipal engineering, architecture or town planning, between the ages of 16 and 30 years, earns rather less than a clerk on General Division. A further point is that, even after the age of 30, a local government qualified technical officer will earn between 20 per cent and 50 per cent less than his counterpart in civil engineering, architecture or town planning and in the Nationalised Industries outside Local Government. We would respectfully submit that in our view, little notice is taken of the fact that time and money is taken up in studying and sitting for examinations in order to qualify for membership of the better known and accepted professional bodies.

In achieving this we believe we are implementing the wishes of NALGO who have as their ambition a fully representative, qualified staff; this is to the ultimate advantage of the local authorities who will benefit from fully trained and qualified staff. We believe such application to work and study should be rewarded with such financial incentive as is deemed appropriate for a person or persons who have decided to make local government their career and accordingly have successfully qualified in their particular profession.

While we are aware that NALGO has done some very valuable work in the Conditions of Service for its members, we feel that, in the implementation of the awards, technical staff have lost a lot of leeway, creating anomalies and differentials that have borne hard on some members of long service.

We sincerely hope that something may evolve eventually to suitably reward and attract new entrants into local government, but it is quite obvious that the present salary scales and their application will neither satisfy existing members nor attract new entrants, who have more lucrative offers of employment elsewhere. . . .

We consider that the time is now favourable as more and more staff are being enticed away into industry and the Nationalised Industries for higher rewards. We would also point out that various local authorities are competing amongst themselves for technical staff by offering more attractive salaries, this practice could be stopped by a National award to the qualified technical staff more realistic than is being shown at present.

'Illiberal Criticism'

SIR,—The comment quoted in your note last week from 'The Observer' concerning Sir Howard Robertson struck me as being not only illiberal but spiteful. Architects who are much in the public eye stand to be shot at and they have to accept criticism as an occupational risk with whatever philosophical resignation they can muster. But they are surely

entitled to expect it to be fair and well-informed. The criticism quoted appeared to me to be neither, for as you make clear, the drawing of the building in question had not been published and Sir Howard's views on the design were unknown.

These pseudonymous scribes of Fleet-street should learn to restrain their pens until they are hurt. One must hope that this is no more than a momentary lapse from 'The Observer's' normally high standard of taste and judgment.

G. J. HOWLING,
Wimbledon, SW19.

Domestic Elevations

SIR,—According to a report in your issue of February 5 (page 284) the PRO of Hemel Hempstead New Town said, 'It would be expensive to design a dwelling so that it appeared impressive from both sides.' This dictum reminds one of the old quip about 'Queen Anne fronts and Mary Anne backs,' prompted by the pretentious houses of some speculative builders of earlier days. One would not have thought it applicable to the generally progressive work of the New Towns.

Much depends, of course, on what is meant by 'impressive,' but surely a pleasing elevation is no more expensive to design than an ugly one.

SPERO.

Permanent Employment of Operatives

SIR,—It is time we reconsidered the system of employing labour that is practised today in the building industry.

The casual system of employment is one of the main factors causing low productivity and poor standards of workmanship. These 'hire and fire' methods are a relic of a past age when good labour was plentiful and cheap: this is not so today. In the majority of firms there is no loyalty between employer and employee; as the turnover of labour is so rapid, there is no time to establish this bond. Many building contractors do not realise the administrative costs involved in taking on employees and dismissing them again.

I feel that until the industry is based upon a settled labour force engaged on more permanent terms of employment instead of the present system, we shall not attract the right man to the industry or raise productivity fast enough.

G. ELLIOTT, [ARICS]
230 Queen's-road, Buckhurst Hill.

'External Rendered Finishes'

SIR,—Digest 131 'External Rendered Finishes' was recently issued by HMSO and it now appears from correspondence since received at the Building Research Station that some of the statements in it have led to some misunderstanding of its intention.

In the penultimate paragraph of the Digest it is stated '. . . . there is not yet sufficient long-term experience with aerated cement-sand mortars used as rendering mixes for any recommendations to be made.' It appears that this statement has been read as though it were applicable to the use of plasticisers in mortars used as undercoats for internal plastering and as brickwork mortars. This is not so; the reason for the statement relating to rendered mixes, i.e. risk of rain penetration, does not apply to the use of plasticised mortars for internal plastering and for brickwork mortars. The latter is dealt with in Digest 126 and there is ample evidence of satisfactory behaviour for both uses.

The reference to masonry cements in the preceding paragraphs of the Digest has also brought comment because of the difficulty of knowing in the absence of a British Standard the composition of the masonry cement. In choosing a mix based on masonry cements for rendering the user should therefore obtain the assurance of the manufacturer that the mixes recommended by him are in fact appropriate alternatives to the cement: lime: sand mixes recommended in the table in the Digest.

R. C. BEVAN,
Building Research Station,
Garston, Watford, Herts.

Vehicles on Building Sites

SIR,—I should like to comment on Mr. C. B. Keenan's letter in 'The Builder' of February 12. The advice that he received from the police is, as it was doubtless intended to be, good safety-first counsel in view of the complex position that can arise when the occupiers of houses, their tradesmen, guests, etc., use so-called private roads.

Mr. Keenan is wrong, however, in thinking that it is necessarily at variance with the information you gave. That set out accurately the registration requirements when vehicles are used on land that is less questionably 'private,' as a building site may well be before any houses are completed and occupied.

If the public have no right of access to an estate under development, and the estate is large enough to justify the use of an exclusive on-site vehicle, there seems no reason for the builder to forgo these privileges.

G. F. WILKINSON,
65 Glenbuck Court, Surbiton.

Architects' Remuneration

RIBA's First Comments on Royal Commission's Report on Medical Salaries

The RIBA has made some first comments on the report of the Royal Commission on Doctors' and Dentists' remuneration which are printed below. An analysis of the findings of its survey of architects' incomes in relation to those of other professions will appear, we are informed, in the April issue of the RIBA 'Journal.'—EDITOR.

'WHY HAS SOCIETY placed such a relatively low value on the services of the architect? The disclosure of the architect at the bottom of the scale of professional earnings, published in the Report of the Royal Commission on Doctors' and Dentists' Remuneration, brings into sharp focus the fundamental questions that have been concerning the profession and the Institute in recent years:

'Is the architect's standard of education and training on a comparable level with that of other professions?

'Have we flooded the market with too many architects and thus debased the coinage?

'What kind of service, both in quality and extent, ought the architect to provide? To what scale of fees does this correspond? Is the RIBA scale too low in relation to the volume and complexity of work that modern buildings require from the architect, and would the client be willing to pay more?

'Could the level of efficiency in architects' offices be increased to enable more adequate rewards to be given within the existing scale of fees? Should the architect's work be differently organised, with greater reliance on non-professional assistance, on standardisation, on central information and technical services?

'It there any real public understanding of the functions of the architect?

'Questions also need to be asked about the other professions to try and understand the factors that may have influenced the present relativities. Do they have a higher proportion of members working in industry, with its relatively bigger rewards? Has their organisation of private practice any features from which architects might profit, e.g., the solicitor with his managing clerk? In public service, do other professions have such a high proportion of their members in the relatively junior grades?

'The Commission's report is likely to serve as a sharp thorn in the flesh of the various Committees of the Institute that are considering these problems, although much more in the way both of fact-finding and heart-searching will be needed before either they or the profession at large find the answers—or indeed can interpret this report satisfactorily.'

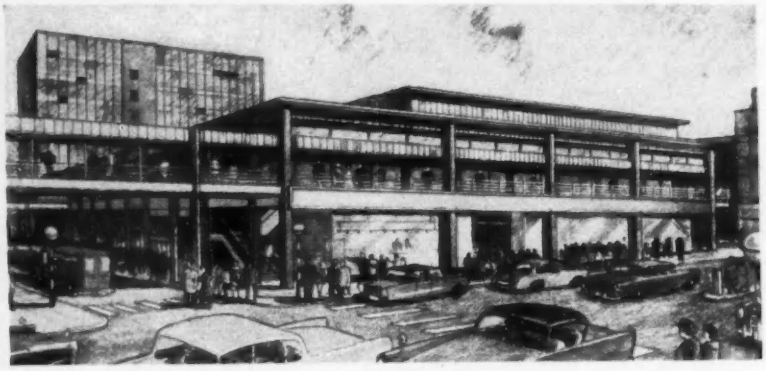
Aesthetics or Cost-control?

THE COST RESEARCH AND TECHNICAL COMMITTEES of the RIBA have designed an 'Any Questions?' session to take place at 66 Portland-place, W1, on Tuesday, March 29 (6.30 p.m.), when Mr. R. Baden Hellard will chair a panel consisting of three architects (Geoffry Powell, Ernö Goldfinger and G. Grenfell Baines), an engineer (H. A. Harris) and a quantity surveyor (J. Nisbet). The scene will be set by a client, Mr. Harry Ward, and the team will address themselves to answering questions on the subject: 'Are Aesthetics and Cost-control Incompatible?' Written questions are invited, and authors of questions selected may be present to put them to the Panel. Such questions should be addressed by March 22 to Mr. A. Williams, Assistant Secretary, at the RIBA.

Fire in Very High Buildings

New Principles Approved by LCC

THE RECENT considerable development of high buildings in London presents special problems of design from the public safety and fire-fighting aspects as well as problems of design due to their conspicuous position, and the London County Council has found that the general arrangement of such buildings and economy of plan may be adversely affected by strict application of standards devised to eliminate in advance every conceivable hazard in the event of a fire occurring in the building. It frequently becomes a question of arbitrating between conflicting claims from the fire precautionary and architectural points of view.



A perspective of the £1m. Norfolk Market Hall shop and office development which is being built in Sheffield by the Hammerson Group of Companies. The architects are Thomas & Peter H. Braddock and the contractors are Higgs & Hill Ltd. Completion is expected early next year.

To meet the main architectural requirements of designers of very high buildings without creating undue risks from a fire-fighting and rescue standpoint, the LCC has now approved the following principles for the guidance of its officers who have to deal with applications for the erection of such buildings under Section 20 of the London Building Acts (Amendment) Act, 1939:

(a) every endeavour shall be made to secure that staircases are located not more than 25 ft. (one room's width) or 35 ft. (one flat's depth) from the ends of very high office buildings or residential buildings respectively;

(b) the present requirement that fire lifts shall serve the top floor of high buildings need not be insisted on as a general rule, provided that the siting and arrangement of staircases are entirely satisfactory and subject to each case being considered on its merits.

The basic principles which were reviewed in 1952 were published for the guidance of applicants as publication No. 3795, which is obtainable from the Council's Information Bureau at County Hall, SE1 (price 1s. 3d., postage extra).

Obituary

Maxwell Ayrton ; M. W. Matts ; C. T. Gerrard

Maxwell Ayrton, FRIBA

THE DEATH OF MR. MAXWELL AYRTON, which took place on February 18 at his home in Hampstead, removes an architect whose contribution to the aesthetics of reinforced concrete design was considerable. This extended to bridges as well as to buildings of which latter the Wembley Stadium of 1924 (in partnership then with the late Sir John Simpson) was outstanding.

Ormrod Maxwell Aryton was born in 1874 and as a young man worked in Lutyens's office, after which he and Simpson entered into partnership. Together they did work at Haileybury College, Broxbourne, and Lancing College; and designed the Cartwright memorial hall, Bradford; the National Epileptic Hospital in Queen-square, London; and art galleries for Glasgow Corporation. Wembley (in which the partners were associated with Sir Owen Williams as engineer) gave them an opportunity to use reinforced concrete as a material in its own right in which the surface concrete was left exposed. Later Ayrton employed the same technique in a number of road bridges notably on the North Circular-road at Edmonton, on the Lea Valley Viaduct, and in Scotland. Impressive though these structures are, more recent developments in techniques leading to slimmer sections produce an effect on today's observer of a solidity which is somewhat overpowering. Judged against the background of nearly 40 years ago, however, these bridges, and indeed Wembley itself, must be regarded as a monumental advance, especially in the variety of surface treatments of the material which included bush hammering to expose the aggregate.

In his middle period as an architect, Ayrton designed various buildings for Bedford College, Regents Park, the teaching school and research laboratories for the Royal Free Hospital in the Grays Inn-road; and a striking building for the National Institute for Medical Research, Mill Hill, on a cruciform plan. For some years he had been in partnership with Mr. Courtenay Theobald, FRIBA, with whom he designed buildings which included the Presbyterian Church of England Church House in Bloomsbury and St. Andrew's Church, Cheam.

Until a recent illness kept him to the house, Ayrton's dapper figure was frequently seen at the Arts Club, but his delight was to entertain, with his wife (a daughter of Sir Ernest Waterlow, RA), in their charming house in Church-row, Hampstead. He was a watercolourist of distinction and his interest in the arts extended to ironwork on which he published a book. His passing leaves a gap in the lives of many friends.

Malcolm W. Matts, MVO, LRIBA

WE REGRET TO RECORD the death of Mr. Malcolm (Malc.) W. Matts, MVO, LRIBA, who had been in practice as an architect for many years at Staple House, Chancery-lane. He was in his 86th year.

Mr. Matts had practised in London for over 50 years, since 1913 at 'Staple House,' which he designed, together with other office buildings in London and the suburbs. In 1939-40 he was responsible for additions to the King's (now the Queen's) Chapel of the Savoy, for which he was made a Member of the Royal Victorian Order by his late Majesty, King George VI. Over many years he was architect to the Territorial Army and Air Force Association of the County of London. Mr. Matts had served on the Practice Standing Committee of the RIBA.

C. T. Gerrard

MR. CLEMENT THOMAS GERRARD, a director and former chairman of J. Gerrard & Sons Ltd., builders and contractors of Swinton, Lancs, died on February 14, following a short illness. He was 72.

Mr. Gerrard was 16 when he joined the firm founded by his grandfather. He became a director at the age of 29 and was appointed chairman in 1951, a position from which he retired two years ago although he remained an active member of the board. He was a member of the special town planning and development committee formed by the Manchester Chamber of Commerce in 1946 and served as chairman of the house committee of the Royal Manchester Children's Hospital.

Music was perhaps chief of Mr. Gerrard's many other interests. He was a Fellow of the Royal College of Organists and was for 56 years organist at the Methodist Church in Swinton, founded and built by his grandfather.

Competition News

Dunbartonshire County Offices, Dumbarton Central Development

Dunbarton CC Council Offices

DUNBARTON COUNTY COUNCIL invites registered architects practising or resident in the United Kingdom to submit designs in competition for County Council Offices proposed to be erected on a site at Crosslet, Dumbarton. The competition will be run in two stages, the six selected competitors at the first stage, which will require a sketch scheme showing small scale plans, elevations and sections sufficient to explain the scheme broadly and to indicate the general composition of the building, will be invited to prepare finished drawings for the second stage.

The site for the project lies on the outskirts of Dumbarton and is bounded by the Stirling Road, which is the principal highway to the north-west of Scotland. The aspects are the River Clyde and Dumbarton Rock to the south, Loch Lomond to the north, and the Kilpatrick hills on the east. The accommodation asked is a County Hall suite and 66,320 sq. ft. of administration offices for all County departments. Dining facilities are to be provided on the top floor, storage accommodation in the basement and parking facilities for 250 cars. Limited residential space is also to be provided. The layout and design should allow for future expansion of the order of 50 per cent.

The promoters have appointed Mr. F. R. Wylie, FRIBA, Professor J. H. Napper, FRIBA, and Mr. James Mottram, ARIBA, as assessors. Each of the six successful competitors at the first stage will receive £400, and the author of the design placed first will receive a premium of £1,500 to be merged with his Scale Fee on his appointment as architect when the work is subsequently executed.

Entries for the first stage must be received by the County Clerk, County Council of Dunbarton, County Buildings, Dumbarton, by 10 a.m. on July 16 next and not on July 30 as previously stated ('The Builder' of February 12). Designs for the second stage must be received by 10 a.m. on October 29. The last date for the receipt of questions is March 31. A deposit of £2 2s. is required for a set of conditions which are obtainable from the County Clerk.

Dumbarton Central Area Development

THE TOWN COUNCIL of the Royal Burgh of Dumbarton invites architects registered in the United Kingdom to submit designs for the design and layout of buildings to be erected as a connected piece of development in the centre of the Burgh. The competition includes the design of a new road bridge over the River Leven. The assessor is Professor R. H. Matthew, CBE, FRIBA.

The site generally is a level one and there are sewers, water mains and gas and electric cables in all the existing streets. No new buildings with complex or deep sewerage requirements are permissible and the pumping of sewage is not contemplated. Competitors are informed that foundations of buildings will require special care because of the geological structure of the area. A boring recently made attained a depth of 250 ft. before reaching solid rock.

Competitors are asked to take account of the existing architectural character of the town. The older buildings are Georgian and there are some small public buildings in varieties of 19th-century classicism with one fine gothic church. Competition designs should show enough townscape detail to give proposals a definite character. The design for the bridge may take any structural form but the author of the selected design may be asked to make any reasonable modifications to meet the requirements of the promoters.

Proposals for the landscaping are to include the quay, which is still in use, and the road leading to it. The schedule of accommodation includes shopping space with storage and service arrangement; office space with one unit suitable for letting to government department; an hotel and restaurant; a community centre; as many dwellings as possible; and parking space for 300 cars. A written report and an estimate of cost should also be included with submitted designs.

Premiums of £1,200, £900 and £500 will be awarded to the authors of designs placed first, second and third respectively. It is the intention of the promoters to proceed with the work for which the author of the design placed first will be appointed architect. The last date for the receipt of questions is March 7, and designs must be received by the Town Clerk (Architectural Competition), Municipal Buildings, Dumbarton, by Monday, May 30, 1960. A deposit of £2 is required for a set of conditions obtainable from the Town Clerk.

Competitions Open

* *The date in italics refers to the issue of* The Builder *in which fuller details appeared.*

FLATS DEVELOPMENT, HALESOWEN.—Organised by TC for 250 flats at Highfields. Assessor: Eric Lyons, FRIBA. Premiums £1,000 with further £1,000 for additional premiums. Conditions from Town Clerk, PO Box 14, Council House, Halesowen, Birmingham, on dep. of £2. **Entries by March 11.** *Nov. 6.*

COUNTY BUILDING, EDINBURGH.—Extension to County Building for Midlothian CC. Assessor: J. Wilson Paterson, CVO, ARIBA; premiums: 750, 500 and 350 gns. Conditions obtainable on dep. of £2 2s. by architects practising or resident in Scotland only, from the County Clerk, County Buildings, George IV Bridge, Edinburgh, to whom designs must be sent by March 15. *November 20.*

WHO HEADQUARTERS, GENEVA.—Competition limited to 15 invited firms for headquarters for World Health Organisation on Geneva site, to be judged by a jury of seven including Sir Howard Robertson. Prizes are 1st, the commission; 2nd, Sw. fr. 25,000; 3rd, Sw. fr. 15,000. Closing date for designs: April 14. *Feb. 12.*

MEDICAL TEACHING CENTRE, CARDIFF.—Competition arranged by the Board of Governors of the United Cardiff Hospitals and the Welsh National School of Medicine for architects resident in Great Britain, Northern Ireland and Eire to submit designs for a proposed medical teaching centre in Cardiff. Assessors are: Sir Percy Thomas, P-PRIBA; F. R. S. Yorke, FRIBA; J. H. Forshaw, CB, FRIBA, Provost A. Trevor Jones, MD, and Dr. A. R. Culley, CBE, MD. Premiums of £5,000 (to be merged with the fee), £3,000 and £2,000 are offered. Conditions from Mr. D. G. Morgan, secretary to the board of governors, United Cardiff Hospitals, Cardiff Royal Infirmary, Newport-road, Cardiff, to whom designs must be sent in by April 30, 1960. *March 27.*

DUMBARTON CENTRAL AREA DEVELOPMENT.—Architectural competition promoted by the Town Council of the Royal Burgh of Dumbarton for the design and layout of buildings to be erected as a connected piece of development in the centre of the Burgh together with the design of a new road bridge over the River Leven. The competition is open to registered architects resident in the United Kingdom. The assessor is Professor Robert H. Matthew, CBE, FRIBA, and premiums of £1,200, £900 and £500 are offered for designs placed first, second and third respectively. Last day for submitting designs is May 30, 1960; for questions March 7. Conditions from the Town Clerk (Architectural Competition), Municipal-bldgs., Dumbarton. Dep. £2 2s. *Feb. 26.*

OFFICES, DUBLIN.—Two stage competition limited to Irish architects for offices for Irish Sugar Co. Ltd., Dublin. Messrs. Raymond McGrath, E. D. Buckley and Alan Hope, FF/RIAI assessors, with Lt.-Gen. M. J. Costello. Premiums: £350 for each of six architects admitted to final stage; £1,000 to winner. Stage I designs to Secretary, Irish Sugar Co. Ltd. by May 3; final designs by August 31; competitors' questions by March 15. Conditions, etc., from Secretary at 7 Clare-st., Dublin, on deposit of £5. *Feb. 19.*

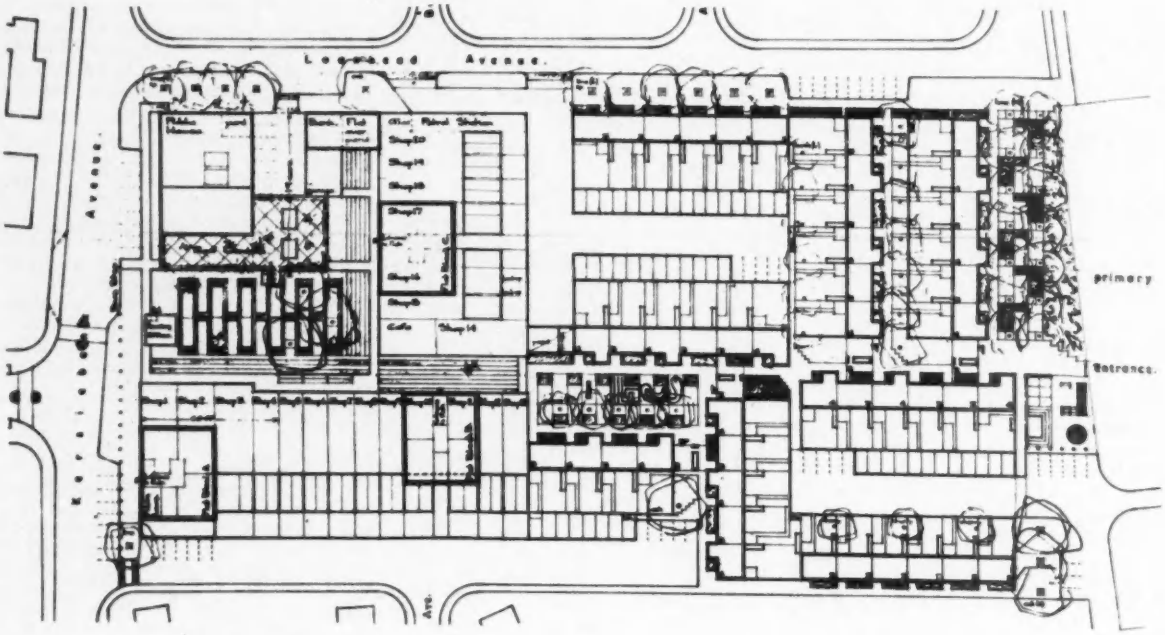
DUNBARTONSHIRE COUNCIL OFFICES.—Two-stage competition open to architects practising or resident in Great Britain or Northern Ireland for County Council Offices at Crosslet, Dumbarton. Assessors: Messrs. F. R. Wylie, J. H. Napper and James Mottram. Premiums: £400 to each of six architects selected from first stage to take part in final. £1,500 additionally to winner. Conditions on deposit of £2 2s. from County Clerk, County-bldgs., Dumbarton, to whom first stage designs by July 16. Final designs by October 29. *Feb. 26.*

CATHEDRAL, LIVERPOOL. — Competition arranged by the Liverpool Metropolitan Cathedral Committee for architects who are British subjects, Commonwealth citizens or citizens of Eire to submit designs for a new Metropolitan Cathedral of Christ the King at Brownlow Hill, Liverpool. Cost £1 million. Assessors: The Most Reverend J. C. Heenan, DD, Archbishop of Liverpool; Mr. Basil Spence, OBE, ARA, PRIBA; and Mr. David Stokes, FRIBA. Premiums: £5,000; £3,000; £2,000. Last day for submitting designs: August 3, 1960. For questions; Dec. 15 last. Conditions from the Competition Secretary, Liverpool Metropolitan Cathedral Committee, 153 Brownlow Hill, Liverpool, 3. Dep. £2 2s. *September 25.*

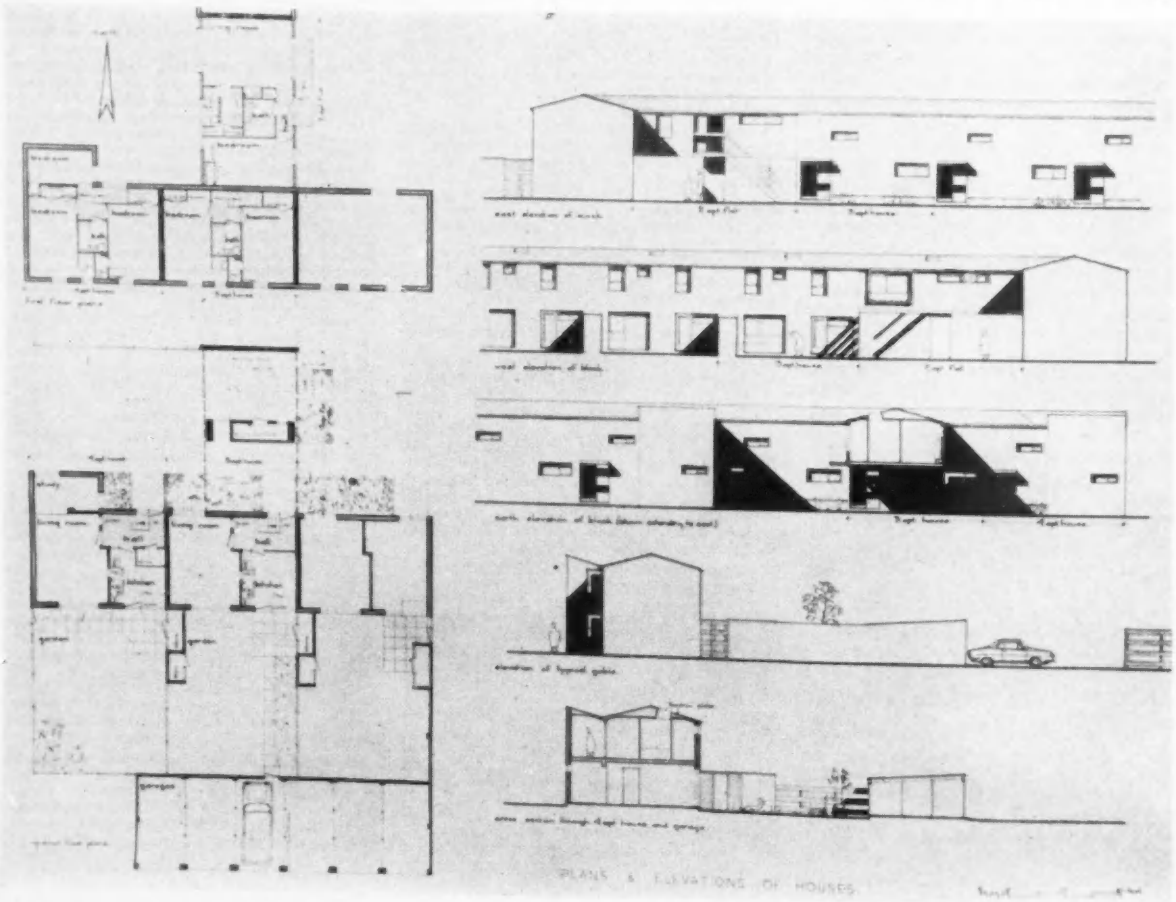
REPLANNING OF TUNIS.—International competition for the development of the town of Tunis. Registration date is February 1 and the final closing date for the receipt of entries is in October. The assessors are: The Secretary of State; the Chief Engineer of Bridges and Roads; the Chief Engineer of Technical Services; M. Plinio Marconi (Rome), M. Antonio Perpina (Spain) and M. Pierre Vago (Paris). Mr. E. Maxwell Fry, FRIBA (London), and Hr. W. Hebebrand (Hamburg) are alternate assessors. Premiums of 5,000, 2,500, 1,500 and two of 500 dinars are offered. Further details from the Secretary, UK Committee of the IUA, 66 Portland-place, London, W1. *December 4.*

NEATH CIVIC BUILDINGS.—Competition open to architects on ARCUK register for new civic buildings at Fairfield, Neath, for Neath BC and RDC. Sir Percy Thomas, assessor. Premiums of £1,000, £500 and £300. Conditions on deposit of £2 2s. from The Town Clerk, Town Hall, Neath, up to March 12. *Feb. 19.*

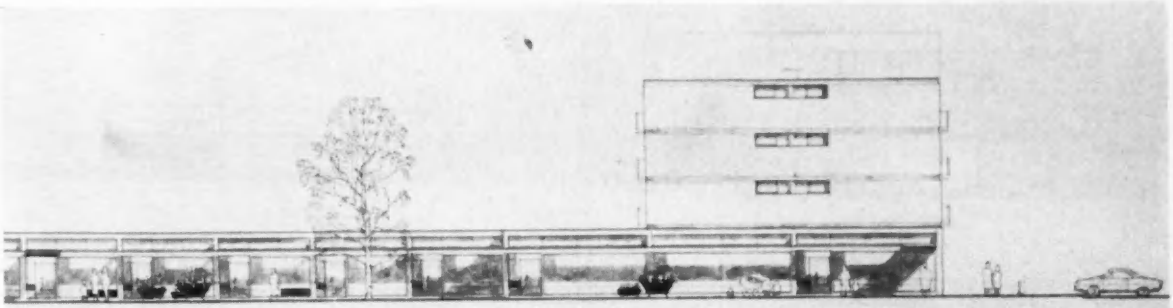
Grangemouth Shopping Centre Competition

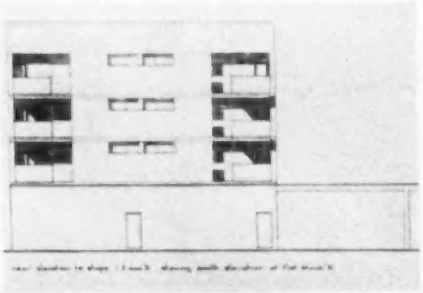


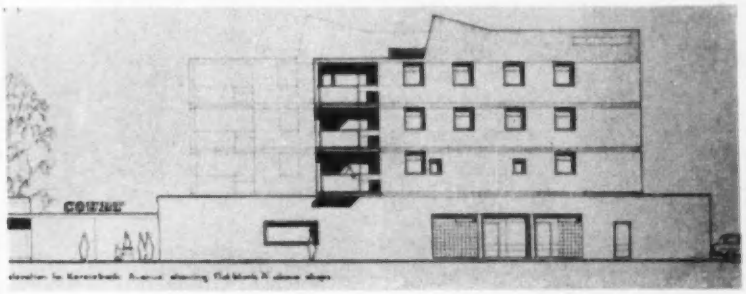
Below : Details of the housing



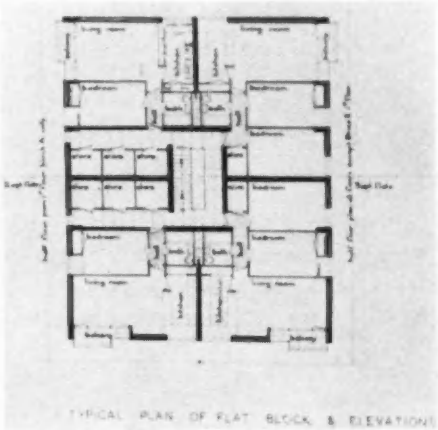
Winning Design (No. 2) by Philip S. Cocker, ARIBA, Architect

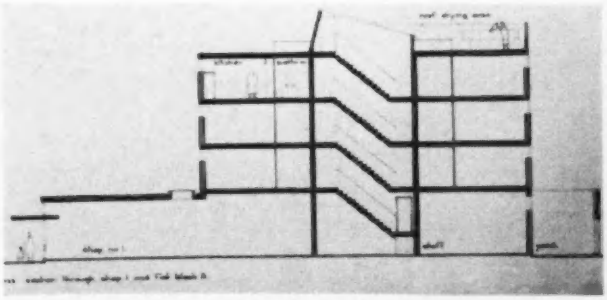


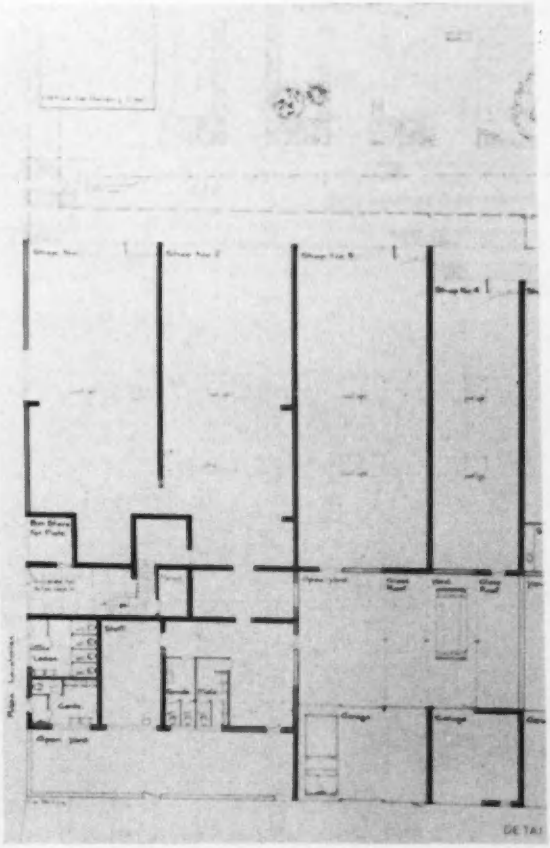


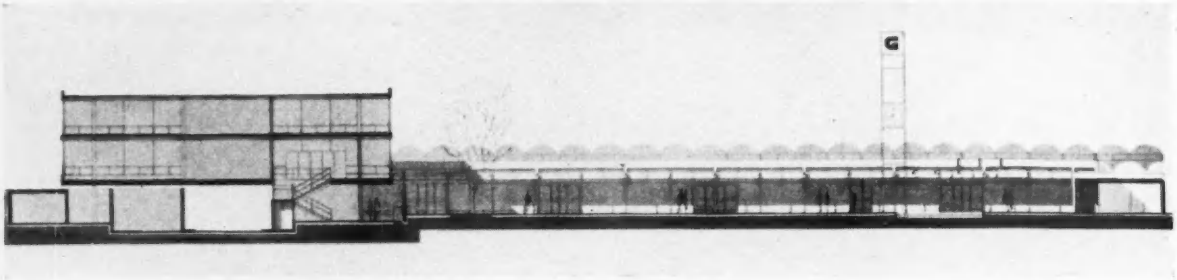


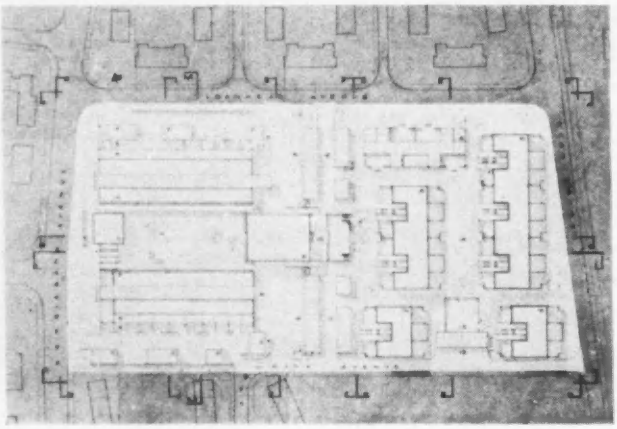
Details of shops and flats



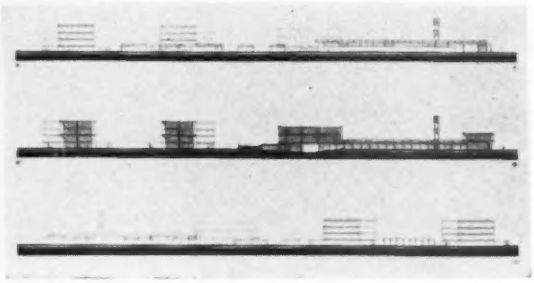


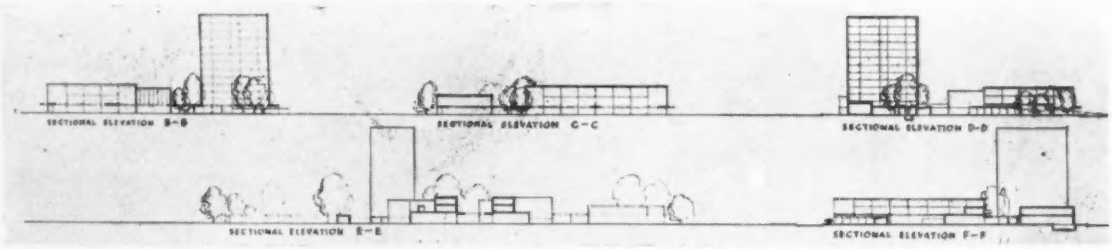


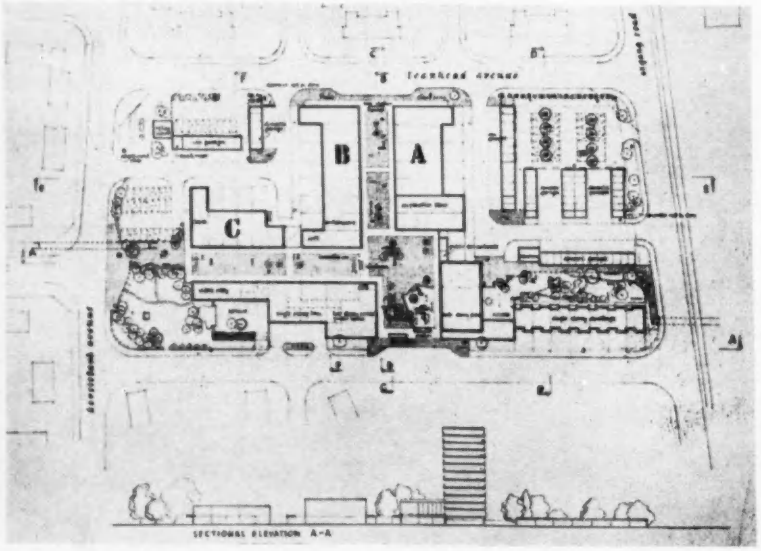




Joint 2nd Prize—Design No. 43
submitted by: FRANK DOLEZAL, CARL HUNTER and THOMAS REILLY

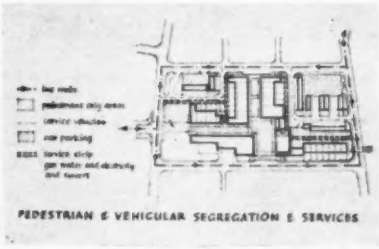


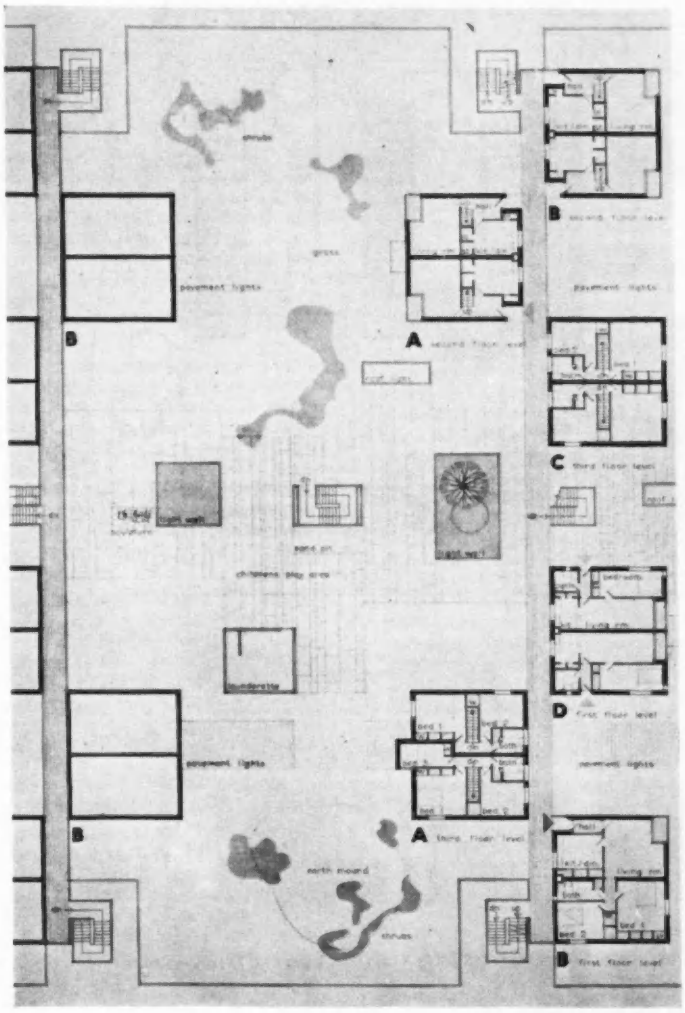




Joint 2nd Prize—Design No. 13

submitted by:
R. GORBING, E. J. ASKEW and T. D. CARTER





Housing layout on the elevated platform

Extracts From Winner's Report

(*See Design No. 2, page 404*)

SEGREGATION of pedestrian and vehicular traffic has been achieved by designing the whole site as a small 'superblock' with a central east-west pedestrian system. The pedestrian will also be given right of way on the perimeter footpath where culs de sac penetrate into the superblock. This will be indicated by a strip of cobble concrete 'protecting' a road level footpath of paving slabs on concrete. Motorists using the shopping area will park in perimeter lay-bys which will also be used to a limited extent by some of the flat block tenants. Shop tenants will use the rear service courts where space is available to park one vehicle per shop.

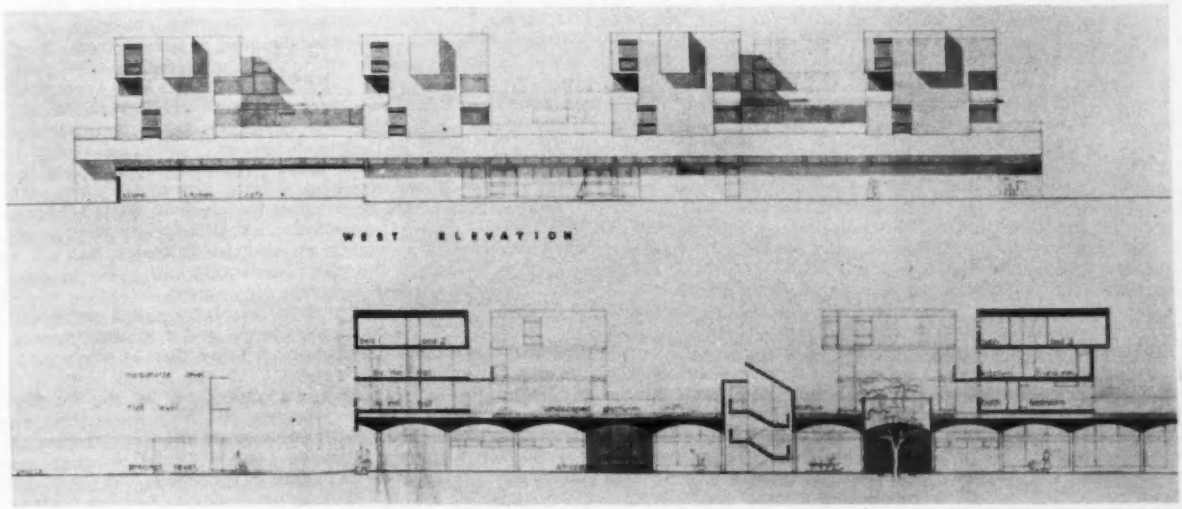
Reconciliation of the need for intimacy, because of the climate with adequate penetration of sunlight, resulted in the provision of single storey shops with three squat blocks of flats over giving good sunlighting of the main shopping square. This arrangement of flat blocks will give most of the flats balcony views to the hills of the south.

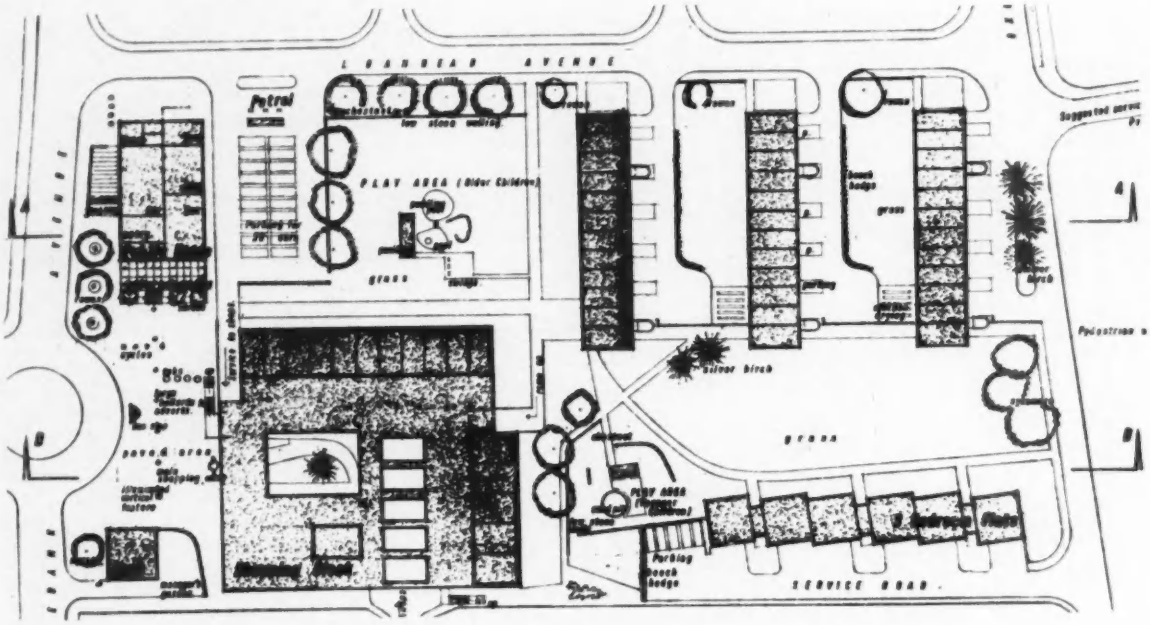
Cost Analysis

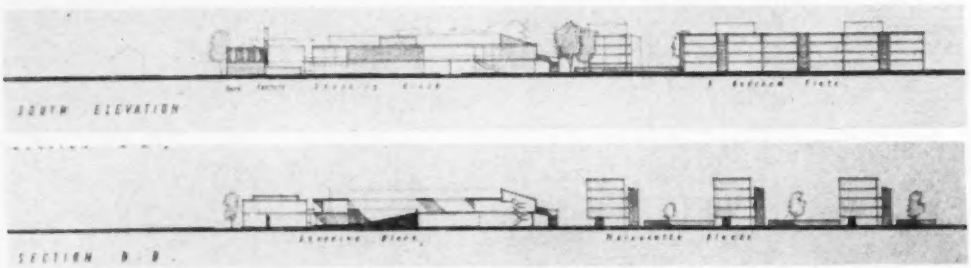
type of building	*floor area*	*cost per sq ft.*	*total cost*
Shops	35,876	117/6	73,544
Flats	24,048	48/0	57,715
Houses	38,260	42/6	81,302
Garages	7,425	20/0	7,425
Car Parks	16,134	4/3	3,408
		Total cost:	£235,500

Joint 2nd Prize—Design No. 40

submitted by: JAMES B. KENNEDY, J. B. FITZGERALD, R. R. BLACK and DONALD BAIN







Joint
2nd Prize
Design No. 42

submitted by:
B. Z. GILLINSON,
C. H. BARNETT
and R. ALLEN

Grangemouth Shopping Centre Competition—Assessor's Report

DETAILS of the competition awards were published in these columns last week. The following extracts concerning the relative merits of the winning designs are taken from the report of the assessor, G. Grenfell Baines, FRIBA, MTPI.

A total of fifty-one designs was submitted, many showing good ideas, and all a keen interest in the project. Practically all could be described as modern, while the total amount of design thought and drafting effort, together with the quality of leading schemes, fully justifies the Burgh Council's enterprise in promoting the Competition.

This new district Shopping Centre and the adjacent housing is essentially a combined Town Planning-Architecture design problem and on this basis the solutions have been judged. Many designs showed quality and originality in their architectural aspects, not matched, however, by their Town Planning which it must be realised is something more even than large scale Architecture. Thus while recognising the limitations of existing surroundings (indeed the precise reason for the Council's effort to bring about an improvement by holding a design competition), it was essential above all things that the scheme should be a good neighbour, open to and readily merging with the surroundings, rather than entirely dismissing them by turning inwards to a self-contained respectability largely displaying backs and service areas to the rest of the district.

In design No. 2 (winning design) the scheme is simple, the architecture lively and graceful without pretention and it may be said to possess the right regional character; the specification is adequate and shows a firm grasp of the practical aspects of translating the design into actual building and civil engineering. Floor areas, dimensions of spaces, widths of access roads, turning spaces and paths are adequate and in accordance with the Conditions. Particularly commendable is the idea of grouping the flat accommodation in three square 'towers' over the single storey shops. These towers have been subtly placed to carry the eye round the compass of the Shopping Centre viewed from whatever angle, and particularly from the main approach along Overton-road.

No. 43 is a beautifully and competently presented scheme of almost mathematical precision, with very interesting house plans and groups, and inventive and arresting methods of construction resulting in exciting and novel forms. The architecture has a blend of sensitivity and firmness with good scale. It would, however, be a more expensive scheme to build, not so amenable to phasing and in feeling less human than the winner.

No. 40 receives a prize for a single 'big idea' filling the whole site with the shopping under a vast raised piazza, the dwellings in flats and maisonettes being poised above a largely artificial landscape. Ingenious in conception, vigorous in architecture, showing capability and promise in design, but not a full appreciation of the planning context, nor really in spite of the author's report, a feeling for climate.

Design No. 13 displayed considerable skill and sensitivity in the layout of the Shopping Centre, and a thoroughness in attention to detail that could well be studied by every competitor not excluding the winner.

Design No. 42 endeavours to compensate for the flat site by raising practically the whole of the Shopping Centre to first floor level. Many other competitors thought it necessary to do this, but none with the same skill and sympathy in landscape or the same ingenuity of planning.

News of the Week

RIBA News

IN ORDER to achieve the new hospital building programme envisaged by the Ministry of Health, several hundred architects will be working on hospital design for the first time, both as private practitioners and in the regional hospital boards. In view of this the RIBA has arranged a course on the 'Sources of Information for the new Hospitals Architect.'

The object is to give architects background information on the health service, the various types of hospital treatment, hospital users, authorities concerned with approving designs, and the latest research into planning. The course has been arranged in collaboration with the Ministry of Health, the Department of Health for Scotland and the regional hospital boards. It will be held from July 11 to 15 next.

An exhibition dealing with 'New Hospital Buildings' is being arranged by the Ministry of Health and the Central Office of Information. It will be held at the RIBA from July 9 to 23 when drawings, photographs and models of recent and proposed hospital buildings will be on view. It will be open to the public.

Lessons from South America

MR. J. L. WOMERSLEY, FRIBA, Sheffield city architect, has just returned from a month-long tour of South America, and some of Sheffield's future buildings may well be influenced by some of the building projects he has seen. The tour included Sao Paulo, Rio de Janeiro, and the new capital city of Brasilia; Caracas in Venezuela, Mexico City and New York.

Commenting on his tour, Mr. Womersley said: 'The South Americans excel in the use of space on a grand scale. Too often in this country the area surrounding a building is dull. One thing we in Sheffield could learn from them, when we build high, is the semi-outdoor use of the ground floor. If we are to keep our prestige, we must plan at least our major civic buildings with top-class material and adequate space.'

Prestressed Concrete Group

THE ELEVENTH annual general meeting of the Prestressed Concrete Development Group was held on January 14 at the Institution of Civil Engineers when the results of elections to the Council were announced. The Council for 1960 will be as follows: President, Mr. C. W. Hamilton; vice-president, Mr. A. J. Harris, MICE; immediate past-president, Mr. W. B. Sykes, CBE; architects and engineers, Mr. A. G. Jury, FRIBA, Mr. A. Kirkwood Dodds, FRIBA, Mr. E. D. Mills, CBE, FRIBA, Mr. D. A. Andrews, MICE, Mr. F. M. Bowen, MICE and Mr. A. Goldstein, MICE; specialist engineers, Mr. R. T. Betts, MBE, Mr. R. F. T. Kingsbury and Mr. J. N. Lowe; contractors, Mr. J. W. A. Ager, AMICE, Mr. J. A. Derrington, MICE and Mr. R. B. Hill, AMICE; products manufacturers, Mr. J. Barratt, MICE, Mr. S. V. Gardner and Mr. A. G. W. Martin; manufacturers of prestressing and reinforced steel, Mr. C. F. Brereton, Mr. K. G. Hann and Mr. K. W. Longbottom; chief technical officer, Mr. A. W. Hill, MICE; secretary, Mr. P. Gooding.

Planning and Employment

A CONFERENCE on 'Planning and the Local Employment Bill' is to be held by the Town and Country Planning Association at Caxton Hall, London, SW, on March 17. The conference will consider how town planning and related policies can help to make areas of persistent unemployment more attractive, both to draw in new employment and to retain population. Among the more specific questions to be discussed will be methods of redeveloping housing and commercial areas suffering from decline. The social, recreational and entertainment facilities of these areas will also come under review. The speakers will include Mr. U. Aylmer Coates, FRIBA, and Mr. J. R. James, deputy chief technical planner, Ministry of Housing and Local Government.

The Planning Forum

A SYMPOSIUM on 'Town Centres in the New Towns' will be held at the Planning Centre, 28 King-street, Covent Garden, on March 14. Illustrated talks will be given by Mr. H. Howgrave-Graham, ARIBA, chief architect, Crawley; Mr. L. G. Vincent, ARIBA, chief architect, Stevenage; and Mr. H. Kellett Ablett, FRIBA, chief architect, Hemel Hempstead. They will discuss the problems and the principles in their approach to the task of creating lively, efficient and attractive town centres. Mr. A. W. Cleeve Barr, ARIBA, chief architect, Ministry of Housing and Local Government, will be in the chair.

IAAS Supper

THE LONDON AND HOME Counties Branch of the Incorporated Association of Architects & Surveyors are holding an informal supper (men only) at the Horseshoe Hotel, Tottenham Court-road, WC1, on March 11 at 7 p.m., 17s. 6d. per head. Those wishing to attend should communicate with the Secretary, 29 Belgrave-square, SW1.

LCC and National Theatre

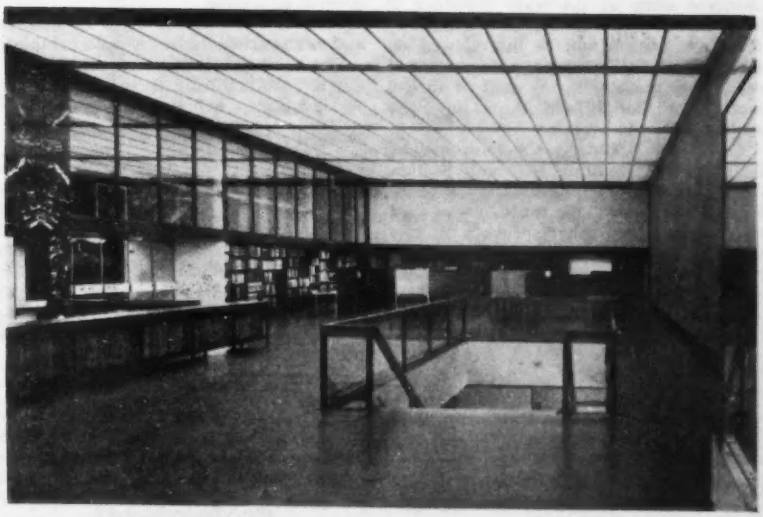
LONDON COUNTY COUNCIL, with strong Conservative support, passed a motion on February 9 asking the Government to start building the National Theatre on the South Bank site.

Mr. Hugh Jenkins, secretary of Equity, the actors' union, moving the motion, said the site in South Kensington might now be worth £100,000, but the South Bank site was certainly worth twice as much. Failure to build a National Theatre had meant that both sites had been sterilised for 10 years. He thought it best to recognise that to do the job properly today would cost nearer £2m. than £1m.

Mr. Ian McLean suggested that it would be better to have a large number of companies going round the provinces. Sir Louis Gluckstein suggested that it would be better to find a site somewhere in the middle of theatreland and not on the South Bank.

Open-Air Sculpture

THE FIFTH open-air sculpture exhibition to be arranged by the London County Council in its parks will be held at Battersea Park during the coming summer. Sculptors whose work will be exhibited are Adams, Armitage, Arp,



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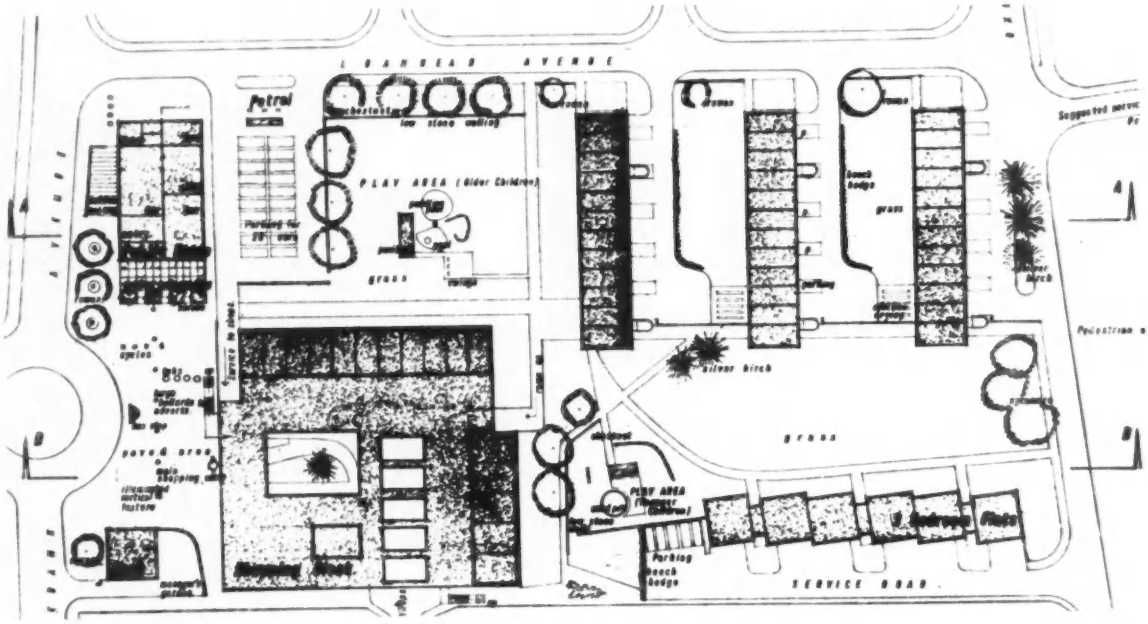

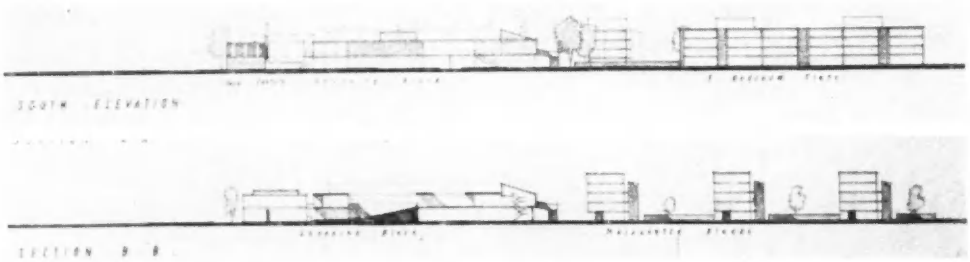

Joint
2nd Prize
Design No. 42

submitted by:
B. Z. GILLINSON,
C. H. BARNETT
and R. ALLEN

Grangemouth Shopping Centre Competition—Assessor's Report

DETAILS of the competition awards were published in these columns last week. The following extracts concerning the relative merits of the winning designs are taken from the report of the assessor, G. Grenfell Baines, FRIBA, MTPI.

A total of fifty-one designs was submitted, many showing good ideas, and all a keen interest in the project. Practically all could be described as modern, while the total amount of design thought and drafting effort, together with the quality of leading schemes, fully justifies the Burgh Council's enterprise in promoting the Competition.

This new district Shopping Centre and the adjacent housing is essentially a combined Town Planning-Architecture design problem and on this basis the solutions have been judged. Many designs showed quality and originality in their architectural aspects, not matched, however, by their Town Planning which it must be realised is something more even than large scale Architecture. Thus while recognising the limitations of existing surroundings (indeed the precise reason for the Council's effort to bring about an improvement by holding a design competition), it was essential above all things that the scheme should be a good neighbour, open to and readily merging with the surroundings, rather than entirely dismissing them by turning inwards to a self-contained respectability largely displaying backs and service areas to the rest of the district.

In design No. 2 (winning design) the scheme is simple, the architecture lively and graceful without pretention and it may be said to possess the right regional character; the specification is adequate and shows a firm grasp of the practical aspects of translating the design into actual building and civil engineering. Floor areas, dimensions of spaces, widths of access roads, turning spaces and paths are adequate and in accordance with the Conditions. Particularly commendable is the idea of grouping the flat accommodation in three square 'towers' over the single storey shops. These towers have been subtly placed to carry the eye round the compass of the Shopping Centre viewed from whatever angle, and particularly from the main approach along Overton-road.

No. 43 is a beautifully and competently presented scheme of almost mathematical precision, with very interesting house plans and groups, and inventive and arresting methods of construction resulting in exciting and novel forms. The architecture has a blend of sensitivity and firmness with good scale. It would, however, be a more expensive scheme to build, not so amenable to phasing and in feeling less human than the winner.

No. 40 receives a prize for a single 'big idea' filling the whole site with the shopping under a vast raised piazza, the dwellings in flats and maisonettes being poised above a largely artificial landscape. Ingenious in conception, vigorous in architecture, showing capability and promise in design, but not a full appreciation of the planning context, nor really in spite of the author's report, a feeling for climate.

Design No. 13 displayed considerable skill and sensitivity in the layout of the Shopping Centre, and a thoroughness in attention to detail that could well be studied by every competitor not excluding the winner.

Design No. 42 endeavours to compensate for the flat site by raising practically the whole of the Shopping Centre to first floor level. Many other competitors thought it necessary to do this, but none with the same skill and sympathy in landscape or the same ingenuity of planning.

News of the Week

RIBA News

IN ORDER to achieve the new hospital building programme envisaged by the Ministry of Health, several hundred architects will be working on hospital design for the first time, both as private practitioners and in the regional hospital boards. In view of this the RIBA has arranged a course on the 'Sources of Information for the new Hospitals Architect.'

The object is to give architects background information on the health service, the various types of hospital treatment, hospital users, authorities concerned with approving designs, and the latest research into planning. The course has been arranged in collaboration with the Ministry of Health, the Department of Health for Scotland and the regional hospital boards. It will be held from July 11 to 15 next.

An exhibition dealing with 'New Hospital Buildings' is being arranged by the Ministry of Health and the Central Office of Information. It will be held at the RIBA from July 9 to 23 when drawings, photographs and models of recent and proposed hospital buildings will be on view. It will be open to the public.

Lessons from South America

MR. J. L. WOMERSLEY, FRIBA, Sheffield city architect, has just returned from a month-long tour of South America, and some of Sheffield's future buildings may well be influenced by some of the building projects he has seen. The tour included Sao Paulo, Rio de Janeiro, and the new capital city of Brasilia; Caracas in Venezuela, Mexico City and New York.

Commenting on his tour, Mr. Womersley said: 'The South Americans excel in the use of space on a grand scale. Too often in this country the area surrounding a building is dull. One thing we in Sheffield could learn from them, when we build high, is the semi-outdoor use of the ground floor. If we are to keep our prestige, we must plan at least our major civic buildings with top-class material and adequate space.'

Prestressed Concrete Group

THE ELEVENTH annual general meeting of the Prestressed Concrete Development Group was held on January 14 at the Institution of Civil Engineers when the results of elections to the Council were announced. The Council for 1960 will be as follows: President, Mr. C. W. Hamilton; vice-president, Mr. A. J. Harris, MICE; immediate past-president, Mr. W. B. Sykes, CBE; architects and engineers, Mr. A. G. Jury, FRIBA, Mr. A. Kirkwood Dodds, FRIBA, Mr. E. D. Mills, CBE, FRIBA, Mr. D. A. Andrews, MICE, Mr. F. M. Bowen, MICE and Mr. A. Goldstein, MICE; specialist engineers, Mr. R. T. Betts, MBE, Mr. R. F. T. Kingsbury and Mr. J. N. Lowe; contractors, Mr. J. W. A. Ager, AMICE, Mr. J. A. Derrington, MICE and Mr. R. B. Hill, AMICE; products manufacturers, Mr. J. Barratt, MICE, Mr. S. V. Gardner and Mr. A. G. W. Martin; manufacturers of prestressing and reinforced steel, Mr. C. F. Brereton, Mr. K. G. Hann and Mr. K. W. Longbottom; chief technical officer, Mr. A. W. Hill, MICE; secretary, Mr. P. Gooding.

Planning and Employment

A CONFERENCE on 'Planning and the Local Employment Bill' is to be held by the Town and Country Planning Association at Caxton Hall, London, SW, on March 17. The conference will consider how town planning and related policies can help to make areas of persistent unemployment more attractive, both to draw in new employment and to retain population. Among the more specific questions to be discussed will be methods of redeveloping housing and commercial areas suffering from decline. The social, recreational and entertainment facilities of these areas will also come under review. The speakers will include Mr. U. Aylmer Coates, FRIBA, and Mr. J. R. James, deputy chief technical planner, Ministry of Housing and Local Government.

The Planning Forum

A SYMPOSIUM on 'Town Centres in the New Towns' will be held at the Planning Centre, 28 King-street, Covent Garden, on March 14. Illustrated talks will be given by Mr. H. Howgrave-Graham, ARIBA, chief architect, Crawley; Mr. L. G. Vincent, ARIBA, chief architect, Stevenage; and Mr. H. Kellett Ablett, FRIBA, chief architect, Hemel Hempstead. They will discuss the problems and the principles in their approach to the task of creating lively, efficient and attractive town centres. Mr. A. W. Cleeve Barr, ARIBA, chief architect, Ministry of Housing and Local Government, will be in the chair.

IAAS Supper

THE LONDON AND HOME Counties Branch of the Incorporated Association of Architects & Surveyors are holding an informal supper (men only) at the Horseshoe Hotel, Tottenham Court-road, WC1, on March 11 at 7 p.m., 17s. 6d. per head. Those wishing to attend should communicate with the Secretary, 29 Belgrave-square, SW1.

LCC and National Theatre

LONDON COUNTY COUNCIL, with strong Conservative support, passed a motion on February 9 asking the Government to start building the National Theatre on the South Bank site.

Mr. Hugh Jenkins, secretary of Equity, the actors' union, moving the motion, said the site in South Kensington might now be worth £100,000, but the South Bank site was certainly worth twice as much. Failure to build a National Theatre had meant that both sites had been sterilised for 10 years. He thought it best to recognise that to do the job properly today would cost nearer £2m. than £1m.

Mr. Ian McLean suggested that it would be better to have a large number of companies going round the provinces. Sir Louis Gluckstein suggested that it would be better to find a site somewhere in the middle of theatreland and not on the South Bank.

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BBC (NETWORK THREE)—'Building Matters.' 7 p.m.

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ARCHITECTURAL ASSOCIATION.—'A Definition of the Architect's Task,' by Sir Herbert Read. 36 Bedford-sq., WC1. 6.15 p.m.

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TOWN PLANNING INSTITUTE.—Dinner. Trocadero Restaurant, Piccadilly, W1. 7.30 p.m.

SATURDAY, MARCH 5

ARCHITECTURAL ASSOCIATION.—Visit to Bowater Paper Corporation factory at Northfleet, Kent. 36 Bedford-sq., WC1. 9.30 a.m.

INSTITUTE OF BUILDERS (LICENTIATE DISCUSSION CLUB).—Annual dinner. The Overseas League, Park-pl., St. James's, SW1. 6.30 p.m.

A Hundred Years Ago

From The Builder **of February 25, 1860**

TREATMENT OF TENDERS FROM BUILDERS.—Sir,—Will you please insert the following in your next paper, as we most strongly protest against the system adopted in the decision of this contract.

We are informed by the architect that his client 'avails himself of the privilege of a clause' in the advertisement for tenders, viz., 'lowest nor any tender necessarily accepted;' as, it appears to us to enable him to get an idea of the cost at the expense of time and trouble of the five or six builders who estimate. If parties about to build have not sufficient confidence in their architect and builder, why not pursue a straightforward and upright course, and employ a disinterested surveyor to go through the building estimate, and pay the surveyor for it?

ONE OF THE FIVE.

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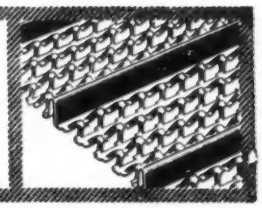

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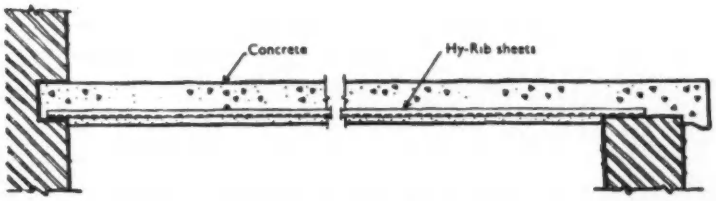

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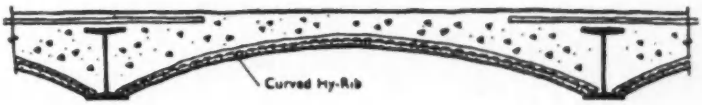

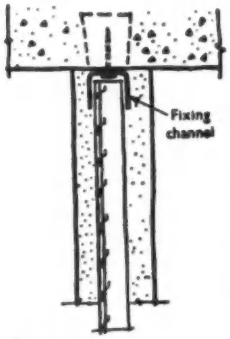

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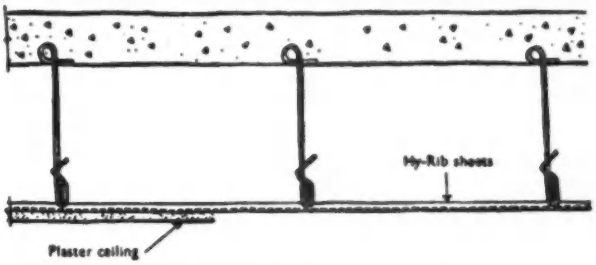

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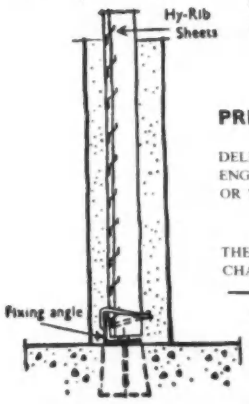

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Batten, Bloc, Brown, Butler, Caro, Cesar, Chadwick, Charoux, Clatworthy, Claughton, Colvin, Dalwood, Dow, Durst, Frink, Gerrard, Gordine, Hepworth, Kennington, King, Lambert, Ledward, McWilliam, Martin, Meadows, Moore, Nimptsch, Paolozzi, Picasso, Richier, Turnbull, de Vasconcellos, Vogel, Wheeler and Zadkine. Iposteguy, Noguchi and Skeaping may also be represented.

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SATURDAY, MARCH 5

ARCHITECTURAL ASSOCIATION.—Visit to Bowater Paper Corporation factory at Northfleet, Kent. 36 Bedford-sq., WC1. 9.30 a.m.

INSTITUTE OF BUILDERS (LICENTIATE DISCUSSION CLUB).—Annual dinner. The Overseas League, Park-pl., St. James's, SW1. 6.30 p.m.

A Hundred Years Ago

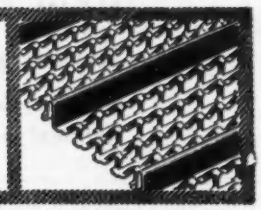
From The Builder of February 25, 1860

TREATMENT OF TENDERS FROM BUILDERS.—Sir,—Will you please insert the following in your next paper, as we most strongly protest against the system adopted in the decision of this contract.

We are informed by the architect that his client 'avails himself of the privilege of a clause' in the advertisement for tenders, viz., 'lowest nor any tender necessarily accepted;' as, it appears to us to enable him to get an idea of the cost at the expense of time and trouble of the five or six builders who estimate. If parties about to build have not sufficient confidence in their architect and builder, why not pursue a straightforward and upright course, and employ a disinterested surveyor to go through the building estimate, and pay the surveyor for it?

ONE OF THE FIVE.

HY-RIB



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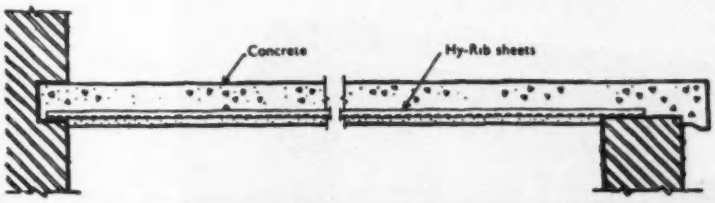

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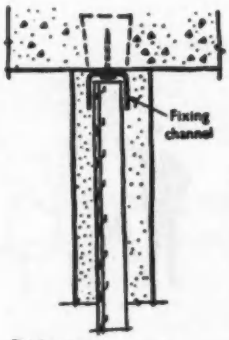

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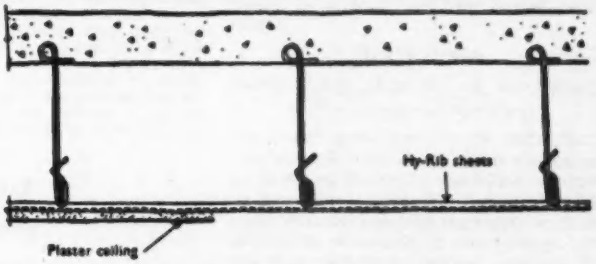

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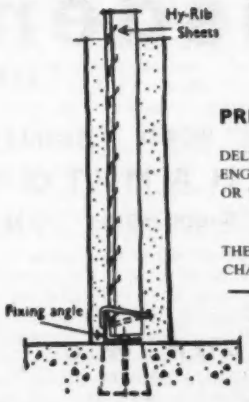

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NEW GROUP OFFICES

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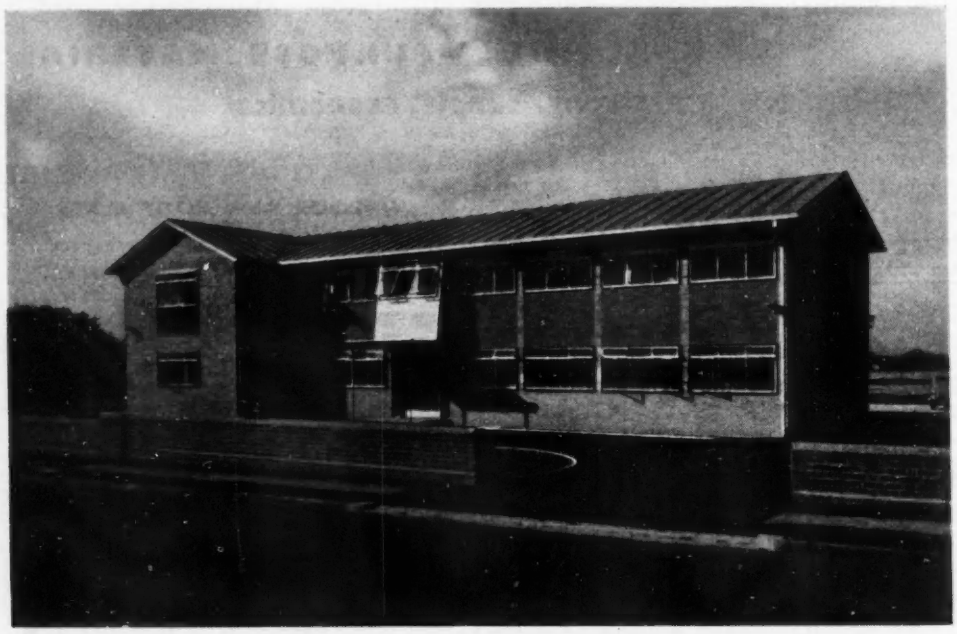
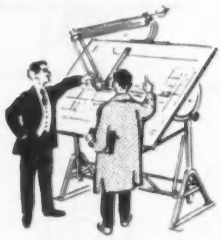
for the South West Metropolitan Regional Hospital Board



Chartered Architects :
Messrs. Gutteridge and Gutteridge



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Edinburgh University Housing Research Unit

Appointments to Staff Announced

THE HOUSING RESEARCH UNIT of the Department of Architecture, Edinburgh University, equipped with funds jointly subscribed by the Nuffield Foundation, the Carnegie Trust, the Department of Scientific and Industrial Research, and Edinburgh University itself, came into being in April, 1959, and reached fully constituted form in October. The Unit, which is under the direction of Professor Robert H. Matthew, CBE, MA, FRIBA, now announces the appointment of the following staff:

Mr. F. R. Stevenson, ARIBA, MTPI, as Senior Lecturer: Besides experience of housing and planning in this country, he has travelled widely in the United States and Canada and in Europe. He is a member of the Danish Institute of Architects and has been a pioneer in adapting continental techniques to British conditions. He comes to the University from the Department of Health for Scotland, where he was a deputy chief architect.

Mr. H. R. Wedgwood, ARIBA, as Senior Research Assistant: Apart from three years at the Building Research Station, he has worked for private architects in London, Zurich, and latterly in Athens.

Mr. J. A. Gray as Research Assistant: Mr. Gray studied at Edinburgh College of Art and has been in charge of the degree students' 'live project' run by this department.

Mr. M. J. Calthrop as Research Assistant: Mr. Calthrop, also Edinburgh trained, comes from the office of Messrs. Robert Matthew & Johnson-Marshall.

Mr. A. Zammit, ARIBA, as Research Student: Mr. Zammit was sent to this unit by the Maltese Government to train in housing research by working here for the current academic session. He is an experienced housing architect.

Mr. N. Dunhill, BSc(Econ), as Sociologist: He has considerable experience of social work in various parts of the British Isles, including industrial cities in the North and new housing areas near London.

Mr. A. W. Winkle, ARICS, as Quantity Surveyor: He comes from an Edinburgh firm of quantity surveyors prominent in the field of cost analysis and cost planning in conjunction with leading Scottish architects. His appointment is by arrangement with BRS, the sponsors of the unit's QS work.

Mr. A. C. Paterson as Technical Assistant: A joiner who comes from MoW, he is to have charge of the model workshop, the photographic darkroom and trade literature.

Research will continue throughout the five-year period, the statement continues, and is, of course, an unending quest, but at two stages during this time the conclusions so far reached will be used as a basis for building a housing group.

The first of these, a group of ninety houses at Prestonpans sponsored by East Lothian County Council, is already at the sketch plan stage, and should be occupied by tenants in time for subsequent sociological studies to be made and included in the final report.

Sketch plans for the second group, at Cumbernauld New Town, ultimately to consist of 800 dwellings with certain community buildings, are expected to emerge towards the end of this year.

The Research Programme

Research is divided into four sections:

1. A sociological study of the factors which turn a group of dwellings into a community. This includes such questions as the effects upon the social success or failure of a housing scheme of such things as landscape, the inclusion of communal facilities, the mixture of types of family units, the provision of open space and privacy, and adequate provision for the motor car.

2. A similar study of the dwelling itself, and the factors which make a house into a home. This study includes such questions as the importance of place, continued occupancy by one family throughout that family's changing size, and the relevance of family habits. It also includes more detailed study of the space required for different functions, such as sleeping, washing, cooking and eating, watching television, hobbies, homework, and for storage, including bicycles, scooters, motorcycles and cars.

3. A study of the problem of access: whether there should be separate pedestrian and vehicular access to each house, to each group of houses, and what forms such accesses should take, whether separate or not. This includes the question whether in some forms of employment a 'dirty' access should be provided.

4. A study of the physical means for putting the results of these studies into practice: methods of construction. This very wide study, conducted by architects and quantity surveyors together, includes such things as the possibility of using more prefabrication, and, in particular, of alternatives to the present monopoly of brick. Cost analysis, cost-in-use, and comparative estimated costs are being regarded as part of these studies.

Members of the team brought with them experience of many countries, and this has since been widened by further travel, which will be extended year by year, mainly to study housing but partly to establish and maintain contact with other similar research organisations abroad. The Unit would welcome correspondence from any organisation or institution either interested in or actually doing their own serious research in the field of housing.

The team so far collected is a nucleus for a larger group which it is hoped to gather as the work proceeds and as more hands are needed. While the project has been shaped, organised and set in motion at a Scottish university, the team itself is by no means all Scottish born or Scottish trained and it is hoped that its findings will not be only applicable to Scotland. An attempt is being made, in formulating basic principles of house design, to achieve a certain degree of universality which would make the unit's research useful to anyone building houses anywhere.

Speeding Up Planning

Minister's Concern Over Appeals Delay

AT A MEETING of the Town and Country Planning Association in London on February 17, MR. PHILIP ALLEN, Deputy Secretary of the Ministry of Housing and Local Government, stated that ways of speeding up machinery for dealing with planning applications and appeals were being considered. In the belief that delays were bringing planning into disrepute, the Minister had given some thought to the setting up of tribunals, which were permissible under existing legislation, to deal with appeals about advertisements, design and appearance.

'He has also considered,' continued Mr. Allen, 'the proposition that inspectors should be authorised to settle appeals on the spot, if both parties expressed willingness for this to be done. This has attractions, but it is not very easy to reconcile with the preservation of the Minister's responsibility to Parliament if, in fact, decisions are being patently taken not by the Minister himself, but by his officers. There are also difficulties about securing an adequate consistency of policy.'

The Minister believed that responsibility lay with local, as well as central, government, to clarify relevant planning policy for the public. This would enable people to have a clear idea from the outset whether their applications were likely to be acceptable. Besides expecting the local authority to give a full statement of reasons for a refusal, the Minister also thought it desirable to avoid ever getting to that stage, if at all possible, by encouraging developers to discuss their proposals beforehand.

Giving figures showing the growth of appeals, Mr. Allen said that in 1959 the department received nearly 9,000 under section 16 of the Town and Country Planning Act of 1947—the largest total so far since its inception. The proportion of appeals allowed was about 30.6 of those decided. At the close of last year rather more than 4,000 cases were outstanding compared with just over 3,400 in 1958.

Societies

Hong Kong Society of Architects

First General Meeting

THE HONG KONG SOCIETY OF ARCHITECTS has, since January 1 last, been recognised as an Allied Society of the RIBA. Formed in September, 1956, the Society has 126 members, representing the majority of the architects practising in the Colony. At its first quarterly general meeting for 1960, held on February 9, the president, Mr. Szeto Wai, said in his inaugural address that affiliation with that body imposed great responsibilities that all members must accept and respect. Mr. Szeto also appealed for the Government to cease the piece-meal consideration of improvements, and to grasp the present opportunity presented by the release of naval and military lands in the centre of Victoria for a comprehensive urban redevelopment plan. The meeting, held in the Air Force Club, Edinburgh House, was attended by 70 members and a vote of thanks was accorded to the president.

Association of Official Architects

The Honorary Secretaryship

MISS MOIRA SHIELD has had to resign Secretaryship of the Association of Official Architects and, pending the election of a new General Council this year, Mr. G. J. Foxley has been appointed as Acting Hon. Secretary.

Creative Craftsmanship

Prince Philip Opens Exhibition at the RIBA

'THE ARTIST-CRAFTSMAN has come out from behind the protection of nostalgia and has stopped trading on the mystique of the hand-made. This generation knows enough about mass-produced goods and it is sufficiently discerning to recognise the need and the place of the artist-craftsman.' This was said by HRH the Duke of Edinburgh in opening, at the RIBA on February 17, an exhibition, 'The Creative Craftsman,' presented by the Crafts Centre of Great Britain. He was received on arrival at 66 Portland-place by the President RIBA, Mr. Basil Spence.

'While we should acknowledge the invaluable and devoted work of the few people who fostered the revival in the early years,' said His Royal Highness, 'it would be foolish not to admit that it was based on nostalgia and regret and an almost sacred worship of almost anything made by hand. Indeed, the Arts and Crafts Society, founded in the nineteenth century, from its inception tended to assume that hand production alone could ensure real quality, whereas, of course, many factories felt that hand production was out of date.

Taking an Objective View

'Today we are beginning to take a more objective view of the situation. There is still a great need to improve the quality—and in quality I include design—of mass-produced goods, on which our standard of living depends. But there are still many things for which there is not a mass demand but which discriminating people realise have a unique quality which only the hand can give. This is important, because just as painters tend to be inhibited by the existence of photography and react accordingly, so in the same way the artist-craftsman tends to be inhibited by mass-produced industry.

'Some of the artistic balance which existed in Europe before industrialisation turned everything upside down has been regained. This means that craftsmen need no longer feel self-conscious about their work. They are recognised, valued and important members of our modern culture. It means that they can set about their work with all the self-confidence and pleasure of their predecessors, who gave so much to our heritage. But there is even more to it than that. The problem of the members of an overcrowded society with its mass living, its mass production, its mass employment and its mass travel, is to retain any kind of individuality. This is where the craftsman can help. He produces individual things for individuals to own, and to possess something unique helps to make the owner unique. This applies equally well to groups of people and to communities.

'This Exhibition should do much to convince those who still believe for one reason or another than craftsmen are a left-over from a bygone age and should be treated as such, that they are wrong. There is a new vitality here and a new confidence born of success.'

In conclusion the Duke said: 'Architects, we believe, as a whole could do much more to employ craftsmen, and that is one of the reasons why the Exhibition is held in this place. But no architect could have done more than Basil Spence, who is so very well aware of the value of good craftsmanship.'

The Compleat Architect

The Work of Sir Roger Pratt

THROUGH THE KINDNESS of Mr. George Walford, FRICS, whose brother-in-law Mr. Michael Pratt is lineal descendant of the architect, we have lately been reading a book which ought to be on the prescribed list for every architectural student—and young quantity surveyor and builder too. 'Sir Roger Pratt on Architecture,' published by OUP as long ago as 1928 for R. T. Gunther, then Curator of the Lewis Evans Collection, Oxford University, might be taken as the complete guide to the practice of building.

Sir Roger (1620-84) was not only in all probability the most successful architect between Inigo Jones and Wren (Coleshill is almost certainly his work and masterpiece, and Clarendon House which stood for 16 years in Piccadilly before being demolished as the result of some Restoration take-over bid, did not fall far behind) but was author and teacher as well, a man skilled in quantities with his own Standard Method of Measurement, and an architect with a proper sense of what is owed to a builder.

'Not to come to any determination in a convenient time, is an effect either of ignorance or of sloth. . . (an architect should be) so forward in his premeditation as to make no trade at a stand for want of his directions, which will cause great repining, etc., and to be careful to see them exactly performed, for otherwise all trades will be at catch with him': this is good advice, as is also that 'an able Architect ought perfectly to understand . . . . the nature and qualities of all the most usual sort of materials,' to 'contrive all things with the most orderly thrift, and longest duration.' And if the reference 'the several kinds and qualities of the material being thus known, the next thing to be sought after will be the prices of them, which I suppose after this way will be the most truly discovered' is not a tribute to the value of cost planning, then Sir Roger's name is Cyril Sweett!

This fascinating book (which was most favourably reviewed in 'The Builder' of December 28, 1928) is in the RIBA library; it could well be adopted by every architectural school if only for the advice it contains to 'resolve, after you have once laid one stone, never to alter your design except it may be done without pulling anything down.' Pratt appears to have been the first English architect to be knighted; he certainly brought honour on his profession before he retired in 1672 to administer the family estates at Ryston, Norfolk, where he built for himself the last house he ever erected. It is pleasant to think that in this house, after nearly three centuries, his architectural folios yet lie.

Protection During Nuclear War

US Seminars on Architectural and Engineering Aspects

THE OUTCOME of nuclear wars will be decided not in terms of years, but in months or even weeks, says a statement by the Pennsylvania State University, USA. The nations of the world will not have time to mobilise and prepare their defences as they have in previous wars; they will have to prepare well in advance.

Atomic shelters would offer considerable protection in a nuclear attack, both from the blast and from the resulting radiation, if information were available as to their construction and requirements.

Two engineering seminars on atomic shelter next summer at the Pennsylvania State University will present a wealth of information in this field.

The first, July 10-22, will deal with the architectural and engineering planning aspects. This two-week short course is designed for architects and engineers who are now or will become involved in planning and preliminary design aspects of buildings, shelters, and facilities to resist the effects of nuclear weapons.

The course will include a summary of effects of atomic weapons, including blast, and nuclear and thermal radiation, functional requirements for protection, the relationship of various protection criteria to total system planning, and planning of integrated shelter systems with regard to the architectural, structural, electrical, mechanical and sanitary sub-systems.

From July 24 to August 5 the short course dealing with structural engineering and radiation shielding aspects will be held. Topics will include analysis and design of structural systems and radiation shielding systems of buildings, shelters, and facilities to resist the effects of nuclear weapons.

There will also be a brief summary of atomic weapon effects data, blast loading of various structural systems types, ultimate strength theory, dynamic analysis and design methods, distribution, intensity, energy levels of nuclear radiation, and other important aspects.

Further information is available from the seminar chairman, Gifford H. Albright, assistant professor of Architectural Engineering, The Pennsylvania State University, University Park, Pa., USA.

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The Week in Parliament

From Our Own Correspondent

Experimental Farm Buildings

IN A WRITTEN STATEMENT about plans for the development of experimental farm buildings, MR. JOHN HARE, Minister of Agriculture, Fisheries and Food, said on February 16 that much research had been and was being done on the basic requirements which farm buildings should supply. It had, however, become increasingly apparent that there was a lack of facilities for development work to bridge the gap between research and practical application and a need for trials of experimental buildings. Development work and trials of this kind could best be carried out on farms, which could be chosen to provide the necessary range of conditions, rather than at a research centre or centres.

He announced: 'To meet this situation, and at the same time to overcome the difficulty that buildings of an experimental or unproved nature would not qualify for assistance under the Farm Improvement Scheme, the Agricultural Research Council proposes to introduce a scheme of co-ordinated experiments under which grants, up to a maximum of 50 per cent. of the approved cost, would be available for the erection in approved cases of experimental buildings or structures on farms or for incorporating experimental features in traditional buildings. The scheme will be administered under the supervision of the Farm Buildings Research Committee of the Council, of which Sir Walter Drummond is the chairman, and the experimental work will be under the control of the Council's Farm Buildings Unit.

'In return for a grant under this scheme, the farmer or landowner by whom the building is erected will be required to co-operate with the Farm Buildings Unit in the design of the building and to provide facilities for the inspection of the building and the observations required during the course of the investigation.

'The scheme will be administered and the grants will be payable by the Agricultural Research Council. In no case will a grant be awarded for a building project for which a grant is being made under any other Government scheme. Experimental or unproved buildings are not in any case eligible for a grant under the Farm Improvement Scheme where grant may only be given if the building is such as a prudent landlord would erect and is such as would clearly provide long-term benefit to the land at a reasonable cost.

'It is not intended to give grant-aid in respect of all projects which comply with specified conditions but only in respect of proposals that can suitably form part of the experimental programme of the Farm Buildings Research Committee. Applications for grant will not in any case be considered in respect of building projects which have already been started. Further particulars of the scheme, and the way in which application should be made for grants under the scheme, will be announced in due course. Farms in England, Wales and Scotland will be eligible for grants under this scheme. The scheme will not cover Northern Ireland.'

Questions in the Lords

After a similar oral statement by VISCOUNT HAILSHAM, Lord Privy Seal and Minister for Science, in the House of Lords, LORD WISE said he was certain the announcement would be acceptable to the industry. He hoped that in the long run it would have the effect of improving farm buildings.

LORD TAYLOR asked if there was any ceiling to the amount of money available for this excellent scheme. Was it being done in collaboration with recent work by the Nuffield Division of Advanced Architecture on experimental farm buildings?

LORD HAILSHAM.—'The work of the Nuffield organisation is being done, I hope, in a full sense of scientific liaison with the Agricultural Research Council. But this scheme will be under the Council only and would have to be considered as a separate entity by Parliament. I am not sure what is meant by "ceiling," but no doubt the amount is not unlimited.'

VISCOUNT ALEXANDER OF HILLSBOROUGH asked the Minister to consider submitting to the Agricultural Research Council the advisability, when preparing to deal with any project under this scheme, of keeping in mind the necessity for having experiments in different climates within Great Britain, in different rainfalls and on differently sized farms so that they would get the best advantage from the results of the experiments.

LORD HAILSHAM said he would bring that point to the attention of the Agricultural Research Council. 'My recollection is,' he added, 'that this is exactly one of the reasons which led them to prefer grants to farmers on farms rather than carry out experiments themselves at agricultural research stations.'

Homes for Service Families

ABOUT £19m. is expected to be spent in the coming financial year in Britain on new accommodation and houses for Service families, states the White Paper 'Report on Defence 1960' presented to the House of Commons on February 16 by MR. HAROLD WATKINSON, the Minister of Defence. This sum compares with about £10m. during each of the last two years.

Adds the report.—'During the current financial year 800 new married quarters, and barracks for 3,600 men, will have been completed, in addition to extensive improvements to existing premises. In the next 12 months a further 8,000 houses and new barrack accommodation for 21,000 men will be under construction.'

Overseas, the report states that a substantial building programme was being pressed forward. 'In the past year, nearly £6m. has been spent on work which includes about 400 new houses and modern barrack accommodation for 1,500 single men and women. In the coming year, expenditure on overseas building is expected to total £10m. Major projects due to be completed include a substantial part of the Malacca cantonment, 200 married quarters in Kenya and single accommodation for nearly 1,500 men, 270 new houses and two new schools in Aden. Other major projects under construction during 1960 will be living accommodation for troops and families in Cyprus and Kenya, 120 flats and houses in Gibraltar and improvements to existing accommodation in Libya.'

Missile Warning Station in National Park

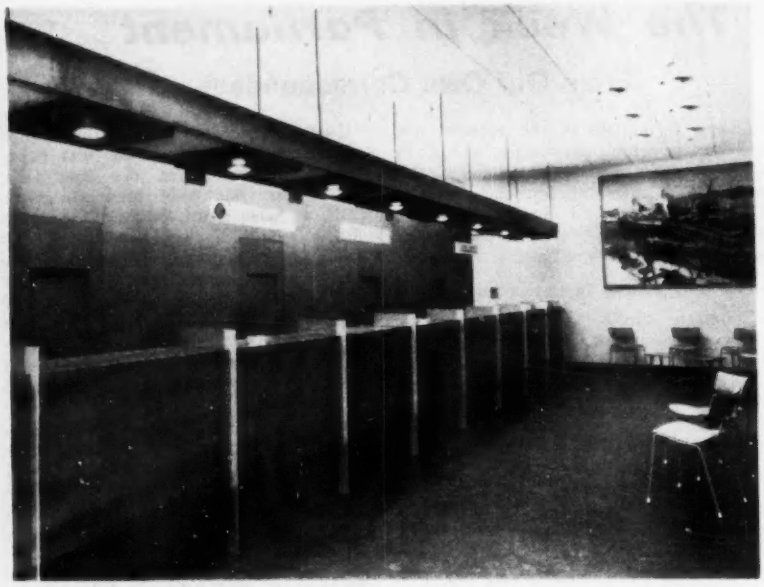
A BALLISTIC MISSILE early warning station is to be sited on Government-owned land at Fylingdales Moor in Yorkshire, and announcing this on February 17, MR. GEORGE WARD, Secretary of State for Air, said the Government greatly regretted that the site had to be in part of a national park.

He added: 'But the topographical, geographical, and the operational criteria governing the choice of site are extremely stringent, and after detailed examination, the Government is satisfied that there is no other suitable site in the whole country.' The station, he said, would be set up and operated by HM Government and the US Government, the UK providing the land, erecting the buildings and providing communications required to link the station with our own authorities. The capital cost to this country is expected to be about £8m and to the USA about £35m.

Mr. Ward explained that the Fylingdales site comprised about four square miles of land, owned mainly by the War Office and partly by the Ministry of Agriculture on behalf of the Forestry Commission, and it was within a larger area which had been used by the War Office for military training.

He said: 'As the site is in a national park, the Government undertakes to demolish the buildings if at any time in the future the station is no longer required. The Air Ministry will discuss with the local authorities, and with the National Parks Commission and other amenity bodies, the detailed siting arrangements and measures to be taken to minimise the effect on the landscape.'

During the exchanges which followed the statement, MR. DE FREITAS commented that it was uncanny that once again a national park was the only possible site in the whole country and MR. WARD assured him that the last thing he had wanted to do was to put the station in a national park but they had searched the whole country and this was the only



The new Continental Car Ferry Centre for the Southern Region of British Railways at 52 Grosvenor-gardens, Victoria. The architect was H. Pittaway, ARIBA, architect, Southern Region, BR; the builders were James Longley & Co. Ltd., of Crawley; and office floor planning was carried out by the Organisation and Methods Officer, SR, and the Road Vehicle Ferry Assistant, Shipping and Continental Department, SR, who is also centre manager

place they could put it as operational and other criteria were so stringent.

Air and Navy Estimates

A LARGE PROGRAMME of operational building and much more money spent on domestic accommodation was forecast in the 'Memorandum on the Air Estimates 1960-61' presented to Parliament on February 18 by MR. GEORGE WARD, Secretary of State for Air. In addition to works expenditure financed from Air Votes, the Air Ministry are asking for £2,200,000 from the Consolidated Fund for the construction of married quarters. This compares with £950,000 in 1959-60.

The large programme of operation building will continue in the coming year on V-bomber stations, surface-to-air guided weapons sites and on the radar defences of the United Kingdom. At home on domestic accommodation, over £7m. is to be spent during 1960-61 on new messes and barracks, and homes for Service families, about double the amount for each of the last two years. Including work already in hand, barracks for 7,000 airmen should be under construction next year together with 3,800 married quarters. This was in addition to the many improvements being made to existing accommodation and to an increase in the number of furnished houses being rented.

Abroad there would be an increase of over 50 per cent in expenditure on living accommodation. Additions and improvements to domestic building were being made in Malta, Singapore and El Adem. In Aden, over and above the large amount of work already in hand, new projects to the value of about £3m. would be started in the coming year. There would also be a substantial building programme in Cyprus.

Sailors' Married Quarters

The 'Explanatory statement on the Navy Estimates 1960-61,' presented to Parliament by LORD CARRINGTON, the First Lord of the Admiralty, on February 17, stated that the total works expenditure during the coming financial year would be about £24.5m. There would be 1,300 married quarters under construction, additional to the 7,000 so far built by the Navy since the war. Other important building work, begun or continued, would include new and modernised single living accommodation at air stations and training establishments; new wireless stations, some modernisation at dockyards and storage depots and repairs and maintenance at shore establishments.

The detailed estimates reveal an estimate of £7,606,000 in 1960-61 for new works, additions and alterations amounting each to £10,000 and over, a decrease of £216,000 on last year's estimate. New minor works are estimated at £958,000, the same as 1959-60.

Scottish Roads Programme

IN A REVIEW of the Scottish roads programme on February 17, MR. NIALL MACPHERSON, Under Secretary, Scottish Office, said that Forth Road Bridge was due to be completed by the end of 1963. They believed the building of the bridge was well up to schedule at present. The north and south approaches would be part of the scheme and in due course would be let as separate contracts in order that they might be phased in with the building of the bridge. They were regarded as part of the scheme and inasmuch as the scheme was to be completed by the end of 1963, the approach roads would also be completed by then.

The local authorities hoped to be able to present the provisional order for the Tay Bridge in 1961. After the order had been enacted the bridge had to be designed and built. It was physically impossible to expect that it would be completed at the same time as the Forth Road Bridge.

Mr. Macpherson said the amount of Government expenditure to be authorised in the period 1958-62 was £40m. In the first two years £27m. was authorised including the Forth Road Bridge (£15.5m.) and the second Clyde tunnel (£3m.). The work in hand or expected to be in hand at the end of next month would amount to about £30m. This included local authority contributions also. This left £13m. or £14m. of work to be authorised by March 31, 1962.

More Money for Building

GOVERNMENT civil spending will rise by more than £120m. in the coming financial year. This was revealed when the Civil Vote on Account was published on February 17, which set out net civil estimates for 1960-61 of £3,218.33m. compared with net and supplementary estimates of £3,097.85m. for 1959-60. The building industry has a considerable interest as, among other things, the rise in spending represents the cost of more schools, more hospitals, more roads, bigger universities, assistance to industry and the promotion of local employment.

The biggest increase in the civil spending is in Exchequer grants to local authorities, which rise from £512m. to £605m., an increase of £93m. About £33m. of this represents expenditure that in 1959-60 was borne on other votes (mostly education, which therefore show decreases). A more comparable figure of increase of expenditure would be about £60m.

The National Health Service votes are up from £563m. to £584m., an increase of £21m.; the prisons from £16.2m. to £18.8m.; universities and colleges from £59m. to £66m.; promotion of local employment from £11m. to £19m.; roads from £108m. to £121m.; housing from £90.4m. to £92.5m. Some other figures are:

	Total Net Estimate,	
	1960–61	1959–60
	£	£
Ministry of Works ...	8·1m.	7·9m.
Houses of Parliament buildings	376,500	345,500
Public buildings, etc., United Kingdom ...	32·9m.	30·6m.
Public buildings overseas	3·66m.	3·56m.
Royal palaces	668,750	602,000
Royal parks and pleasure gardens	935,000	900,000
Historic buildings and ancient monuments	1·2m.	1·1m.

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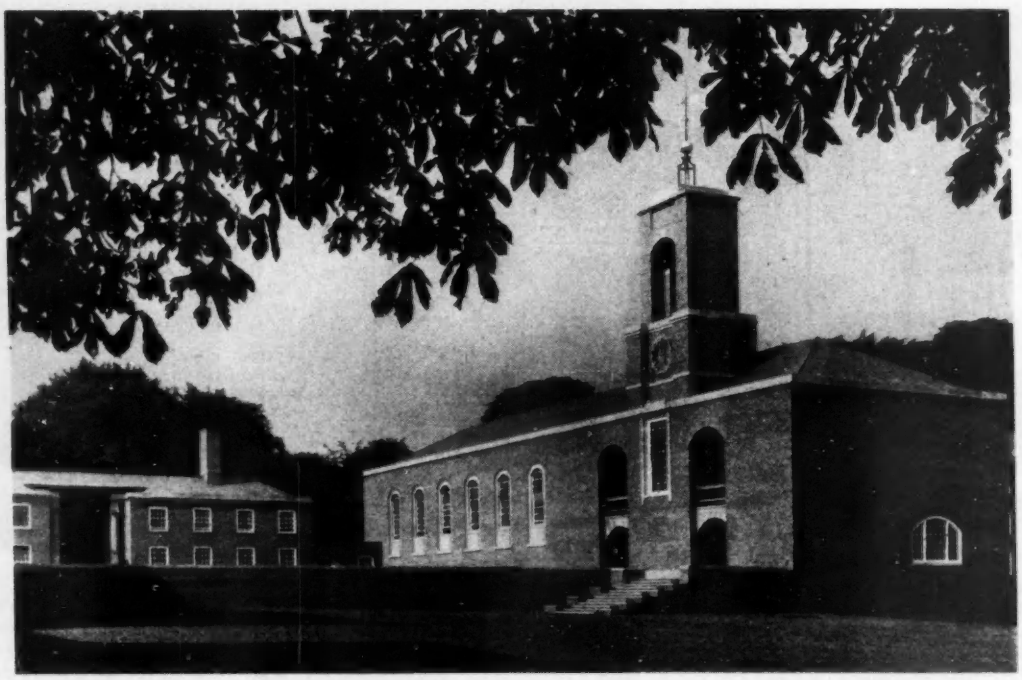

Cripps Hall of Residence, Nottingham University. The scheme included seven blocks, a warden's house and ancillary buildings, which are grouped round two quadrangles. View is of the Clock Tower and entrance to the Great Hall.

Architects: Horace Farquharson, Donald H. McMorran, A.R.A., George Whitby, M.B.E.

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UK Aid for Volta River Project

ASKED to what extent he promised aid for the Ghana Volta River project, the Prime Minister, MR. HAROLD MACMILLAN, said on February 18 that his talks with the Prime Minister of Ghana, Dr. Nkrumah were confidential. It would be realised, he added, that many important aspects of this bold and imaginative project were still under examination, so that it would have been premature to attempt to reach conclusions about external finance.

MR. MASON said it was desirable that small States who had recently received independence should receive some economic aid from Britain. The Russians had been sending trade delegations to Ghana with a view to weaning her away from the Commonwealth by offering economic aid.

MR. MACMILLAN thought that the economic aid which Britain had been able to give since the war represented a fine record. With regard to this project, there were two questions. There was the financing of the smelter which was now being studied by an organisation called Valco, a group of aluminium companies. There was also the project for the hydro-electric plant, and the International Bank had recently sent a mission to Ghana to appraise the economic aspects of that. While these two questions were under discussion, the question of assistance from the UK or of the part we might play in a large, joint effort did not yet arise.

Competitive Tendering

Deputising for the Minister of Works who had influenza, MR. HARMAR NICHOLLS, Parliamentary Secretary, Ministry of Works, said at question time on February 16, that it was the Ministry's policy to place contracts for construction work after competitive tendering but the Minister did not consider that advertising for an unlimited number of tenders was a satisfactory system.

He had been asked by MR. SPRIGGS to undertake to adopt free and open competitive tendering for all the department's contracts and 'the widest possible use of the usual channels for the securing of maximum public advertisement.' MR. NICHOLLS added in reply.—'The system of inviting tenders from a selected list of approved firms is the one recommended by several independent committees since 1944 and was commended only a few months ago in the Code of Procedure for Selective Tendering published by the Joint Committee of Architects, Quantity Surveyors and Builders.'

MR. SPRIGGS.—'Is the Parliamentary Secretary aware that if he does not give firms an opportunity to show what they can do his Department will never be in a position to know whether these firms are fit to do the work?'

MR. NICHOLLS.—'I can assure Mr. Spriggs that any firm can get on to the Ministry's list of approved firms. If he has a firm in mind which he thinks ought to be on the list I shall be delighted to look into the matter.'

MRS. BARBARA CASTLE said this problem had arisen in connection with the provision of facilities in the Palace of Westminster. The Stokes Committee had commented adversely on the fact that certain urgently needed improvements to the Library were not carried out because of the high level of Ministry of Works estimates, and the committee recommended that this work could be put out for competitive tendering. Could the Minister be asked why this had not been done?

THE PARLIAMENTARY SECRETARY felt that Mrs. Castle had added to the point he was making. 'One has to be certain,' he said, 'that firms which are invited to tender are capable of doing the work. As far as this Royal Palace is concerned, one would invite only people who had the facilities, the ability and the know-how necessary for getting the work done. It is possible for any firm which has the facilities and which can show that it can do the work, to be put on the Ministry's list to be invited to tender.'

MR. SPRIGGS then asked how many firms or companies received invitations to tender for Departmental contracts, and why the Department refused tenders, or did not allow interested firms to tender, in view of the specialised knowledge of some firms which wished to tender.

MR. NICHOLLS.—'Four to eight contractors are normally invited to tender for works contracts according to the size of the job, selected from the Department's list of approved firms. These arrangements are satisfactory to the industry generally.'

MR. SPRIGGS.—'Is not the Minister's policy perhaps in danger of creating a monopoly or a price ring of some kind?'

MR. NICHOLLS.—'I think that if there were any difficulty about any firm getting on the approved list there would be that danger to both the public and the building industry. Tendering is best covered by firms being asked to tender for work which it is known they are capable of doing.'

Other Business

Public Library Construction

Asked if he would introduce legislation to implement the recommendations of the Roberts Committee on the public library service, SIR DAVID ECCLES, Minister of Education said on February 11.—'The Government accepts the need for legislation in this field and I hope shortly to begin discussions with the associations of local authorities on my proposals.'

One of the recommendations of this report was that to meet the need for considerable improvement in public library premises and for many new library buildings, a higher priority should be given as soon as possible by the central government and library authorities to premises and equipment for public libraries. More and better public libraries were needed.

£5m. for School Laboratories

MR. ALBU asked the Minister of Education on February 11, what steps he was taking to improve the provision of science laboratories in grammar schools and secondary modern schools.

SIR DAVID ECCLES.—'A total of about £5m. will be spent in the 1960-61 and 1961-62 major building programmes to improve laboratory accommodation in existing schools; in addition new schools have the full range of science facilities. I regard this provision as one of the most important elements in the building programme.'

Tower Hill Re-development

An all-party deputation of members of both Houses of Parliament saw MR. HENRY BROOKE, Minister of Housing and Local Government, on February 11 to give their views on the Tower Hill re-development in the City which includes a proposal for a five-storey office block between All Hallows Church and the Tower. Mr. Brooke promised to consider carefully the views expressed.

A rebuilding scheme, announced last November (illustrated in 'The Builder' of December 4) has been passed by the LCC and the Court of Common Council, after some amendment to meet the views of the Royal Fine Art Commission.

Euston Station Controversy

While three other Labour MPs have added their names to that of MR. WYATT to the motion in the House of Commons about Euston Station reconstruction, six other Labour members have tabled an amendment to delete the substance of Mr. Wyatt's complaint and make the motion read that the House 'congratulates the British Transport Commission on their modernisation proposals for Euston Station.'

Covent Garden Market Scheme

MR. JOHN HARE, Minister of Agriculture, Fisheries and Food, confirmed on February 18 that legislation for the setting up of a statutory authority to run Covent Garden Market was being prepared, but he was unable to say when it would be introduced. He indicated that the LCC were still negotiating for a site at the junction of Old-street and City-road, to be used as an annexe.

He added: 'I know that the LCC are anxious to bring these negotiations to a conclusion as quickly as possible as they have a genuine interest in the matter because of the continuing fire risk which affects their responsibility as far as Covent Garden is concerned.' He also said he had received deputations from Finsbury and Shoreditch and listened to representations, but he thought that without the annexe no progress could be made to improve conditions at Covent Garden.

Experimental Farm Buildings

CLA's Views on Design

THE COUNTRY LANDOWNERS' ASSOCIATION has issued a statement on the Government's decision (reported on page 413) to make grants available for approved experimental farm buildings put up by private enterprise. In the Association's view, experimental buildings should be designed with the following factors in mind:

1. Obtaining the best possible environment for livestock and poultry at an economic cost of production.
2. Incorporating the findings of work study as applied to building layout.
3. Making use of new mechanical and labour-saving devices in internal fittings.

Building Wage Increases

A Challenge to the Industry

MR. D. E. WOODBINE PARISH, FIOB, president of the National Federation of Building Trades Employers, told members of the Council of the LMBA on February 18 that it was the duty of every builder constantly to examine his organisation and his methods of working so that they as an industry could keep inflation at bay. He was speaking about the operatives' wage claim which was recommended for acceptance on February 12.

Mr. Woodbine Parish referred to the wage negotiations recently undertaken by the civil engineers which resulted in a reduction in working hours in the winter without loss of pay, and a new agreement on overtime rates. The working hours agreement meant in fact that civil engineering operatives would receive an increase in their wage packets of 1½d. an hour. The financial implication of the overtime agreement would depend on how much overtime they worked.

'It must be said straight away,' he continued, 'that, contrary to the belief expressed in many quarters, at no time has there been closer liaison between the NFBTE and the FCEC. We were kept fully informed of the intentions of the FCEC and we were given every opportunity of expressing our views. Liaison, however, does not necessarily mean agreement and in the event we were unable to dissuade our civil engineering friends from taking the course they did. It was inevitable that the decision reached by them should have some influence upon our own negotiations, and indeed this proved to be the case.

'In our National Joint Council negotiations it was made quite clear by the operatives that to have different wage rates on building and civil engineering work among men who were interchangeable would not only result in considerable difficulties but could strain and damage our good industrial relations with them. Your representatives felt that there was much in their arguments, and they were also persuaded that the time had come when a greater value should be placed on craft skill. The settlement therefore of 1½d. an hour for labourers and 2½d. for craftsmen can be considered as a logical and fair agreement. The fact that these decisions should not come into force until April 18 also shows a good understanding on both sides.

'One thing, however, is of vital importance, and here issue should be taken with those members of the general public who immediately rush into figures on the increased cost of building resulting from such a wage agreement. This increase in labour costs of something under 4 per cent must be absorbed by increased productivity. If we as a nation are unable to offset increased earnings by increased productivity, then we have nothing else to look forward to other than progressive inflation. Do not accept this wage settlement in any way other than as a challenge, a challenge to keep our costs steady. As the greatest single industry in the country we have responsibilities commensurate with our greatness.'

The Decorators' Art

A Century of Progressive Development

THE NEW HEADQUARTERS for Sanderson in Berners-street not only provides its owners with a much needed efficient and adequate place of business, it also gives to London a unique centre for the display of decorative materials par excellence. It has been designed and built specifically for such display and is in itself an exercise in the use of all kinds of material and types of skill for this purpose. It reflects the trends and tastes for which the designer has to cater and stimulates his ideas without necessarily providing the solution. Two of the most outstanding and controversial British artists of the last fifty years are represented by a piece of statuary by the late Sir Jacob Epstein and a startling stained glass window by John Piper.

Although the House of Sanderson provides a full range of machines, equipment and tools for every kind of decorative work, they are best known for their wide variety of wallpapers and fabrics. As part of their centenary celebrations, not the least of which is the opening of their new headquarters and showrooms, Sanderson have revised their catalogues and wallpaper collections.

Their centenary collection includes a wide range of embossed designs with linen and hessian textures in slub and cane weaves; textile effects in silks, velours and velvets; and many sophisticated modern designs, some conventional, some pictorial and some blatantly abstract. The predominance of Regency patterns in rich opulent motifs and simple vertical stripes reflects the growing popularity of this period style. One notices too the heavy floral patterns which suggest the beginnings of a revival of those stuffy Victorian drawing-rooms.

Perhaps the most interesting of the new wallpapers is the Sanderson 'Tempora' series, a range of inexpensive and intriguing modern designs. These are the work of artists and designers from many parts of the world, many of them prize-winners and other entrants in the centenary competition sponsored recently by Sanderson. The designs were selected by a panel which included Sir John Anderson, a member of the Contemporary Art Society; Lady Casson, Mr. Humphrey Spender, ARIBA, Mr. Paul Reilly and Professor Wyndham Goodden.

The designs are fresh, full of interest and vitality and completely free from dusty retrospection. Each is produced in a variety of contrasting colours so that the use of one pattern is not restricted.

Among the floral patterns is an abstract presentation of a flower spray design ('Rosa') by Hilary Lister. Other abstracts include a freely drawn horizontal effect in line arranged as a vertical stripe ('Calligraphy') by Maj Nisson. Three charming pictorial designs are 'Pageant' by Gwyther Irwin, 'Knights' by Jan Le Witt, and 'Les Sylphides' by Alexander Klechi. One paper, ideal for nursery or playroom decoration, is 'Old Medway' by R. J. Hamper; it suggests the cool cleanliness of the English countryside in spring. 'Romantic Simplicity' by Michael Morse, circles drawn on a plain pastel wash, is yet another example of simple but effective design.

The architects are Messrs. Slater & Uren.

Objections to Multi-Coloured Roof

Investigation Thwarted by Snow

RESIDENTS in the neighbourhood of a new house in Wonford Close, Walton-on-the-Hill, lodged an objection to the multi-coloured roof constructed by the builders. Permission had been given by Banstead Council's town planning committee for brown glazed tiles to be fitted to the roof, and when the complaint was received, the planning committee chairman, Cllr. W. G. Plant, went along to investigate but could not see the roof for snow.

At the last meeting of the council, a question on the colour of the tiles was raised and councillors learned that the architect was to be informed that the colour should be in accordance with the approved plan.

The architect has apologised for the difference and told the council that he thought a mixture of colours would relieve the monotony of the roof. The matter is still being considered by the planning committee.

Housing in Monmouth

Councillor Complains of High Price

'BECAUSE OF THE AMOUNT OF work which building contractors have, they are now dictating terms.' This statement was made by COUNCILLOR FRANK EDWARDS, who was speaking at a meeting of Abercarn council's finance committee where tenders for the building of a further 152 houses at Trinant were being considered.

Councillor Edwards went on to say that even if the lowest tender was accepted, the rents would be over £2 a week, and he said that in his opinion the committee was being taken for a ride by the contractors.

The surveyor, MR. MALCOLM T. BENJAMIN, said that the figures were comparable with previous tenders if all factors such as recent wage increases, the steepness of the present site and an extra external building, were taken into consideration.

The committee decided to defer acceptance of the tenders for the present until the matter has been more fully investigated.

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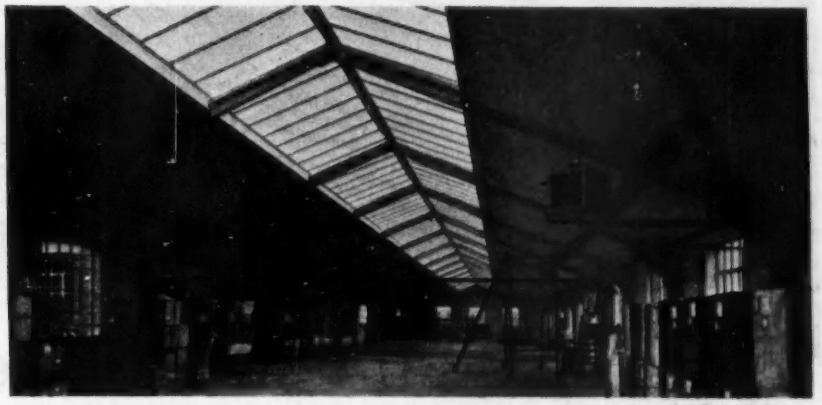

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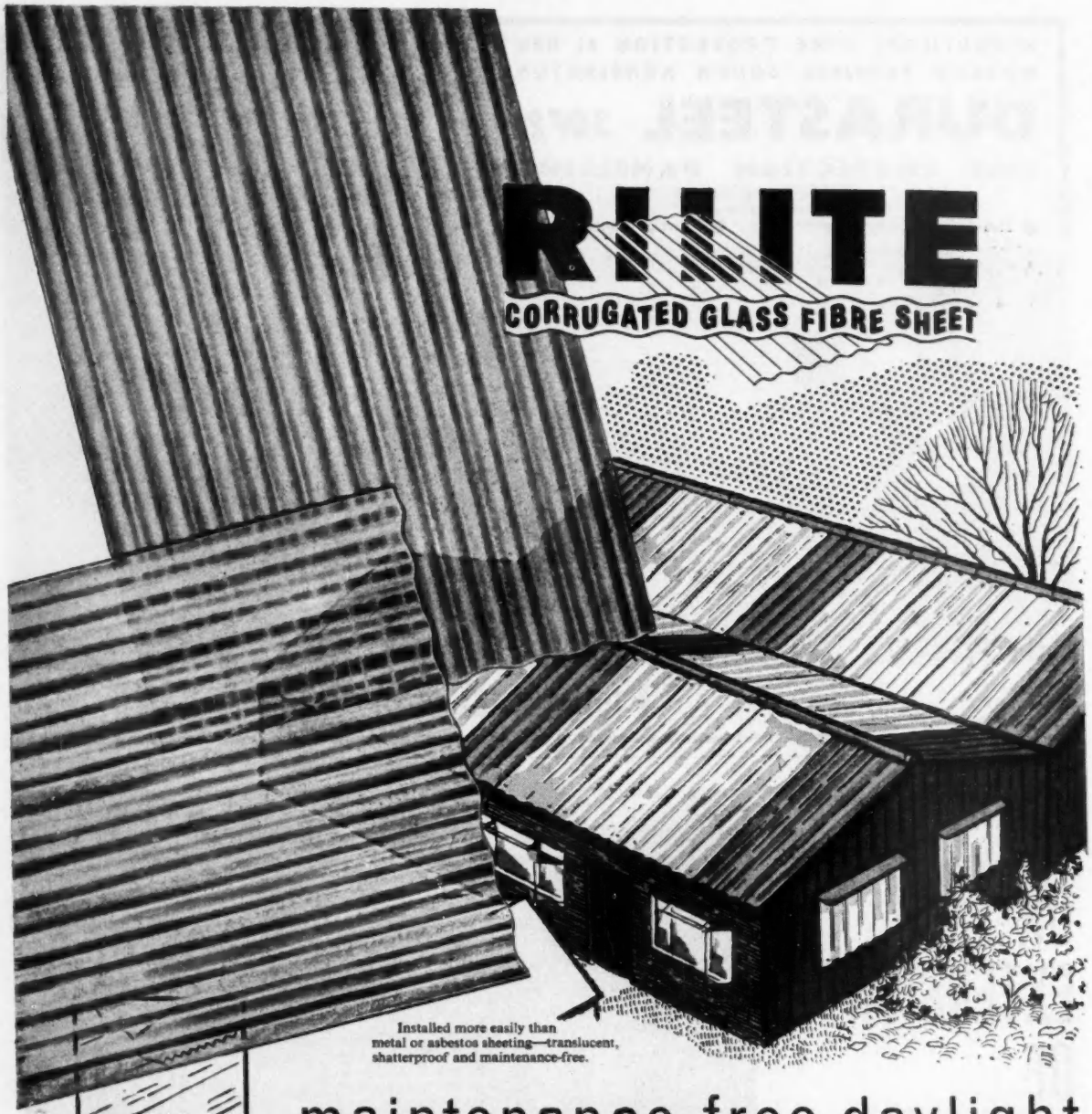

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Reducing Fire Waste in Buildings

Some Recent Developments

IN A NORMAL year there are about 120,000 outbreaks of fire and although the proportion has decreased, roughly half of these are in buildings. In addition an average of 700 people lose their lives and 125,000 are injured each year. MR. D. I. LAWSON, MSC, MIEE, FINST.P, quoted these figures to emphasise the need for wise expenditure on fire protection. He was giving a talk on 'Recent Developments in Reducing Fire Waste' at the Insurance Institute of London on February 1. Mr. Lawson continued:

When we think of fire waste we think of burned out factories and houses to the extent of about £25m. per annum. To this must be added the loss due to the interruption of production until the people thrown out of work can be reabsorbed into the industrial pattern. We must consider in addition the cost of maintaining fire brigades and of providing adequate fire protection in the buildings and in this way the total investment in fire comes to probably somewhere between £50m. and £100m. per annum: part of this is direct loss, the other part is a voluntary payment either towards providing an efficient fire service or by providing safe standards of construction, to keep the direct loss as low as possible. There are therefore two approaches to reducing fire waste, one by dealing with the problem of fire loss and the other of seeing that the expenditure on fire protection is wise.

There are about 120,000 fires a year and roughly half of these are in buildings, although in recent years the proportion of fires in buildings seems to have decreased.

The increasing use of electricity has meant an increase in fires from electrical causes. These appear to be largely associated with electrical apparatus rather than with fixed installations such as wire switchgear and cabling. The popularity of oil-burning portable appliances has increased rapidly during recent years. Quite apart from the possible dangers due to draughts, fires are caused by overfilling, overturning and overheating.

A Vintage Year for Fire

The year 1959 will long be remembered as a vintage year for fire. The figures for the number of attendances made by the brigades are not yet complete, but the most recent estimate from the Joint Fire Research Organisation suggests that they will exceed 200,000, as compared with a normal year of 120,000. The losses due to fires have increased also and this would lead to the suspicion that a dry period such as has been experienced may lead to an increased number of outbreaks inside buildings as well as outside. If it were possible to relate the number of outbreaks of building fires to the climate prevailing at the time, then from the weather forecast it should be possible to broadcast a warning to the public when a time of extreme fire danger was approaching.

While it is important to reduce as far as possible the causes of fire, it is also very important to ensure that fires shall not spread rapidly throughout a building. Experiments with fires in rooms indicate that the wall linings have a large effect on fire spread. This has led to a large number of tests being carried out on wall lining materials. The results of these tests have been published recently by HM Stationery Office in a booklet, 'Flame Retardant Building Materials.' Quite recently a number of serious fires in factories has focused attention on the problem of fire spread in industrial buildings. These together with the provision of the Factories Thermal Insulation Bill have led to an experimental programme to determine the contribution of wall linings in large buildings.

Use of Models

From experiments using models we are beginning to learn how great a part window openings and quantity of fuel play in determining fire conditions and before long it should be possible to design structures in relation to the fire conditions that are likely to occur in their use. This is such an encouraging field of research that other countries (USA, Canada, Italy, Holland and Germany) have agreed to join us in a co-operative effort to understand how building design influences fire severity. From this work it will be possible also to say how much heat is radiated from building fires and this in turn will give a definite indication as to how far buildings should be separated. In fact, experiments of this kind have already enabled recommendations to be made for the Scottish Building Regulations.

Modern buildings are constructed so that if a fire occurs in one part it is confined to the compartment in which it starts. This means that walls, partitions, columns and floors must be subjected to the conditions of a fire and their performance examined. Prestressed concrete constructions have grown in importance in recent years and a research programme has shown how this new material may be used safely in buildings. Perhaps the best illustration of our confidence in the results we have obtained is that it has been used for our own Models Laboratory in which we carry out quite large fire experiments.

We are currently engaged on a programme of work on the fire resistance of hollow bricks, as these would effect considerable economy in buildings if they were generally adopted.

The classification of roofs has proved an embarrassment in this country for many years. A roof is required among other things to prevent the entry of fire into a building. Clearly it must not spread flame over its surface rapidly or it will become a hazard to other buildings. This has been met in the past by calling for incombustible constructions, though some exceptions to this have been allowed. By subjecting a large number of different roof constructions to the radiated heat which might be experienced if a neighbouring building were on fire, it has been possible to devise a roof test, a description of which will be found in BS 476 part 3. In this way it is now possible to provide a rational system of grading roof constructions both according to the hazard of penetration and of spreading fire across the exterior surface.

When there is a departure from traditional standards to new methods of construction without due regard to fire precautions the incidence of fire is likely to increase. In one type of post-war house the rate of fires attended by the fire brigades amounted to 43.8 fires per 10,000 houses at risk per annum and that in more than one-half of these the fire had spread beyond the room of origin. The walls and ceilings of these houses were constructed with a fibre insulation board which allowed a fire completely to envelop a room within 5 minutes. From the results of experiments at the Joint Fire Research Organisation the interior surfaces of these houses were covered with an incombustible board which would allow 20 minutes before a fire had completely involved one room. After this had been done the rate of attendance by the fire brigades fell to 2 per cent of the former figure.

Cost Control

Applications Invited for Nottingham Conference

A FURTHER CONFERENCE on methods of control of building costs at the design stage is to be held at Nottingham University from Friday, March 25, until Sunday, March 27. The conference, which is sponsored by the Cost Research Liaison Committee of the RIBA and the Royal Institution of Chartered Surveyors, will be on the same lines as those already held at Great Missenden, Bristol, York and Manchester.

The conference arrangements are being made jointly by the RIBA and the Nottingham, Derby and Lincoln Society of Architects. It is primarily intended for the Midlands region, and it is unlikely that there will be a further conference in this area.

Applicants for the conference, which is residential, are asked to write to Mr. W. L. Dunn, FCA, Messrs. Chamberlain and Merchant, Park House, Friar-lane, not later than March 7, stating age, professional or other qualifications, place of work, and in what capacity, and what, if any, experience in the application of cost control methods. The conference fee is 8 gns. inclusive of accommodation.

South Bank Pedestrian Ways

As a step to the proposed system of overhead pedestrian circulation linking all the new buildings on the South Bank, the LCC's General Purposes Committee has recommended the employment of engineering consultants to prepare schemes and estimates for three pedestrian bridges, one linking the Waterloo Station concourse with the new Shell building and the other two over Belvedere-road. The consultant's fees are estimated to cost £4,300.

MoW Winter Lectures

Programme for March

THE MARCH PROGRAMME of Ministry of Works lectures on subjects of interest to the building industry is as follows:

Barnsley.—March 1: 'Small Heating and Ventilating Systems,' by A. N. Robinson, at the College of Technology, Church-st. 7.15 p.m.

Lincoln.—March 1: 'Use of Laminated Timber in Building,' by W. A. Chugg, at the Technical College, Cathedral-st. 7.15 p.m.

Luton.—March 1: 'Small Pipe Central Heating,' by W. J. G. Langstaff, at George Hotel, George-st. 7.15 p.m.

Reading.—March 1: 'Settlement of Buildings,' by S. R. Rosenak, at the Technical College, Kings-rd. 7.15 p.m.

Torquay.—March 1: 'Work Study and Planning in Building and Civil Engineering,' by C. R. Miller and A. Fleming, at South Devon Technical College, Teignmouth-rd. 7.30 p.m.

Skegness.—March 2: 'Dampness in Buildings,' by W. A. Hammond, at YMCA Hall, Grosvenor-rd. 7.15 p.m.

Trowbridge.—March 2: 'Prevention of Accidents in the Building Industry,' by J. A. Hayward, at West Wiltshire and Trowbridge College of Further Education, College-rd. 7.15 p.m.

Cheltenham.—March 3: 'Prevention of Accidents in the Building Industry,' by J. A. Haywood, at North Gloucestershire Technical College, Dept. of Building and Surveying, Lansdown-rd. 2.30 p.m.

Cheltenham.—March 3: 'Organisation of Building Work,' by R. C. Sansom, at North Gloucestershire Technical College, The Park. 7.15 p.m.

Middlesbrough.—March 3: 'The RIBA Form of Contract,' by D. Gardam, at Cleveland Scientific and Technical Institution, Corporation-rd. 7.15 p.m.

Wigan.—March 7: 'The RIBA Form of Contract,' by D. Gardam, at the Mining and Technical College, Library-st. 7.30 p.m.

Cardiff.—March 7: 'Single-Stack Drainage,' by A. F. E. Wise, at the Technical College, Llandaff. 7 p.m.

Stafford.—March 8: 'Settlement of Buildings, by R. Rosenak, at the County Technical College. 7.15 p.m.

Weymouth.—March 8: 'Introduction to Site Costing for Builders,' by A. E. Chitterden, at South Dorset Technical College, Newstead-rd. 7.30 p.m.

Newcastle-upon-Tyne.—March 9: 'Glued Timber Laminations,' by W. A. Chugg, at YMCA, Connaught Hall, Blackett-st. 7.15 p.m.

Norwich.—March 9: 'Work Study in the Building Industry,' by R. Geary, at Flixton Room, Samson and Hercules House, Tombland. 7 p.m.

Burnley.—March 10: 'Safety in the Building Industry,' by J. A. Hayward, at the Municipal College. 7.15 p.m.

Folkestone.—March 15: 'Introduction to Programming and Progressing,' by A. E. Chittenden, at the Technical College, Shorncliffe-rd. 7.15 p.m.

Manchester.—March 15: Discussion, 'Value for Money in Building,' by E. S. Benson, S. W. Spencer, R. E. L. Carlyle, and Stanley V. May, at the College of Building, Hardman-st. 7.15 p.m.

St. Albans.—March 15: 'New Developments in Plumbing and Drainage,' by F. L. Barrow, at Hertfordshire College of Building, Hatfield-rd. 7.15 p.m.

Kingston upon Hull.—March 16: 'Oil-fired Domestic Heating Installations,' by J. W. Musgrave, at the Church Institute, Albion-st. Hall. 7.15 p.m.

Margate.—March 16: 'Adhesives for Wood' by R. A. C. Knight, at Thanet School of Art and Crafts, New Cross-st. 7.15 p.m.

Hammersmith.—March 17: 'Building High,' by N. Wakefield, at Hammersmith College of Art and Building, Lime-grove, Shepherds Bush, W12. 7.15 p.m.

Stockton-on-Tees.—March 17: 'Dampness in Buildings,' by W. A. Hammond at YMCA, Little Theatre, Dovecot-st. 7.15 p.m.

Chesham.—March 22: 'Small Pipe Central Heating,' by S. C. Elliot, at the Technical School, Whitehill. 7.15 p.m.

Weymouth.—March 22: 'Settlement of Buildings,' by S. R. Rosenak, at South Dorset Technical College, Newstead-rd. 7.30 p.m.

Wrexham.—March 22: 'Leadership and Management in the Building Industry,' by Sir Robert O. Lloyd, at the Technical College, Mold-rd. 7 p.m.

Llangefni.—March 23: Film show 'Building and Engineering Subjects,' at Shire Hall. 7.15 p.m.

Birkenhead.—March 23: Technical films on building, at the Technical College, Borough-rd. 7.15 p.m.

Derby.—March 23: 'Work Study in the Building Industry,' by K. C. Symons, at Derby and District College of Art, Green-lane. 7.15 p.m.

Connah's Quay.—March 24: 'New Developments in Plumbing and Drainage,' by F. L. Barrow, at the Technical College. 7 p.m.

Rotherham.—March 24: 'Practical Formwork Design and Construction of Concrete,' by J. G. Richardson, at the College of Technology, Howard-st. 7.15 p.m.

Redcar.—March 29: 'Prevention of Accidents in the Building Industry,' by J. A. Hayward, at the Cleveland Technical College, Corporation-rd. 7.15 p.m.

Bradford.—March 30: 'Glued Timber Laminations,' by W. A. Chugg, at the Institute of Technology, Great Horton-rd. 7.15 p.m.

Gloucester. — March 30: 'Single-Stack Drainage,' by T. J. Griffiths, at Gloucester Technical College, Brunswick-rd. 7.30 p.m.

Blackburn.—March 31: 'Prestressed Concrete,' by H. Kaylor, at the Municipal Technical College. 7.15 p.m.

Mansfield.—March 31: 'Structural Uses of Timber,' by W. Parkinson, at Mansfield Technical College, Chesterfield-rd. south. 7.15 p.m.

Presentation to London Apprentices

LMBA Director on Changes in Methods and Materials

THE PRESENTATION of the 1959 National Joint Apprenticeship Board Prizes to London apprentices was performed by the Director of the LMBA, Mr. G. H. A. Hughes, OBE, FRICS, FIArb, at a ceremony held at the headquarters of the RIBA, 66 Portland-place, W1, on Wednesday, February 17. The ceremony was chaired by Mr. E. Smith, chairman of the Apprenticeship Committee of the London Master Builders' Association.

In a clear and somewhat reflective address, which followed the presentation of the prizes, MR. HUGHES congratulated the apprentices and their parents on choosing building as a career. The enormous opportunities within the industry were apparent, and apprentices who worked hard were sure to succeed. He praised the Committee's apprenticeship scheme which, he said, was 'second to none.' The support of the technical colleges was also to be appreciated.

He then touched on the 'cradle to grave' service provided by the building industry, and expressed his confidence that there was sufficient work in the forseeable future to keep all the apprentices very busy for years to come. He looked back on the changes in the industry during his own lifetime, and asked the boys to look forward to try to anticipate the changes in methods and materials which might take place during the next 60 years. The changes already taken place in the industry in the past 60 years in comparison with any other time in history were enormous.

A commendatory vote of thanks was proposed by MR. E. L. JONES, MBE. London Regional Seceretary, NFBTO, who spoke of Mr. Hughes' service to the industry, which was appreciated by everybody. For many years he (Mr. Jones) had known him as a wise and able administrator.

The vote of thanks was seconded by MR. E. J. COOK, President, LMBA.

Midland Federation

Call for Trained Personnel

'WHEREAS IN THE PAST a number of enlightened employers have understood the vital question of training their staff in the best practice and technique, there have been a number who have only paid lip service to the need for technical education and industrial training.' MR. D. E. PARISH made this statement at the Midland Federation's annual meeting in Birmingham on February 23, and continued: 'This apathetic attitude must now give way to a clear recognition of the social and industrial responsibilities that have to be accepted by each and every employer if the building industry is not to be faced with a critical shortage of fully trained personnel in the years that lie ahead. No industry can be better than the personnel engaged in it and there must, therefore, be both adequate replacement and continuous expansion of the total capacity and quality of the industry if the annual improvement in the input/output ratio of resources is to be achieved. Senior executives must accept their inescapable duty for giving an enlightened and dynamic lead.'

Direct Labour Inquiry

MIDLAND builders have been asked to tell their Federation of any evidence of excess costs in work undertaken by direct labour departments of local authorities, it is stated in the Federation's report.

The report states that the problem of direct labour in building is of paramount importance to the membership of the trade and the Federation is 'keeping the question under constant review and taking all possible action.'

'Unfortunately,' the report continues, 'the Ministry of Housing and Local Government no longer insists that competitive tenders should be obtained for all direct labour contracts and is now satisfied if tenders are obtained from time to time to test the market.

'Members have been requested to submit to the Federation all factual evidence adverse to direct labour operations, particularly where excess costs are evident on works so undertaken.'

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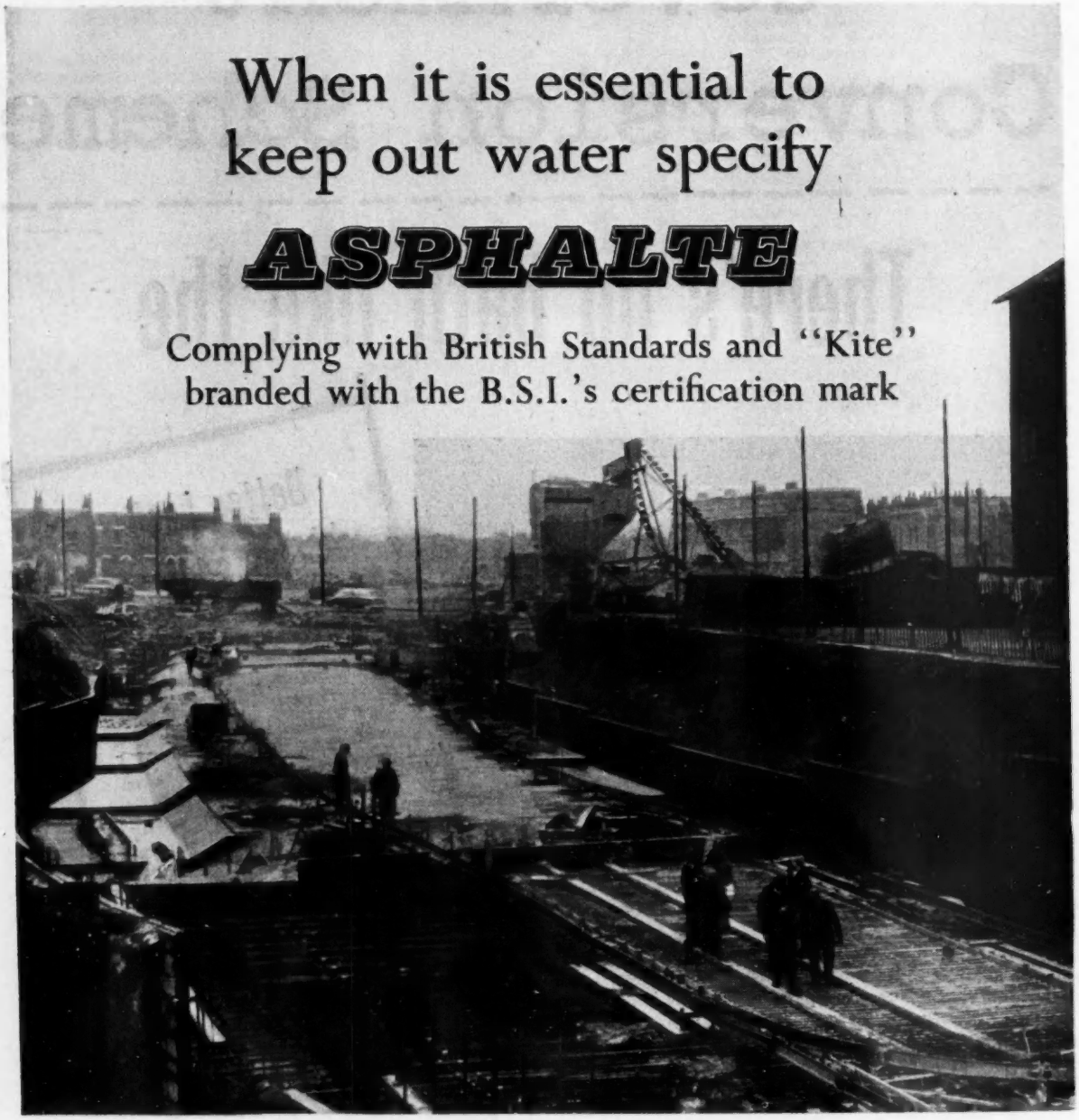

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Social Changes in the Countryside

Objects of Planning Policy Defined

A PAPER on 'Planning in Relation to Social Changes in the Countryside' was given by MR. VICTOR BONHAM-CARTER at a meeting of the Town Planning Institute held in London on February 3. After discussing the various aspects of his subject Mr. Bonham-Carter summed up his conclusions as follows:

What then is the object of planning in relation to social changes in the countryside, and what are some of the means by which this object may be achieved? By planning, I refer not only to the County Planning Office, but to all authorities who exercise development powers of one kind or another in the countryside.

The object, I would say, is simply to preserve and strengthen the rural community, for its survival as an effective social unit, so that it can:

(a) Service the land, which provides the nation with an important part of its food, timber and other raw materials.

(b) Help preserve the national heritage of natural beauty and resources, and of certain traditions and qualities inherent in country life, especially those of intimacy and self-help.

(c) Live and work in the manner and environment to which it has been accustomed, and to which it has a right. At present, I believe, about one-seventh of our population is regarded as rural. I would say that that is the least we can regard as representing a reasonable balance between town and country in terms of population. I would also add that we should do everything to retain at least 30 million acres of cultivable land, for economic, strategic and other reasons, not to mention hill and moorland and rough grazings.

Practical Suggestions

Here are some of the suggested means:

(a) Husband land and reclaim it wherever possible from misuse in the past, whatever the cost.

(b) Encourage the introduction of small units of industry to country towns and large villages, in order to provide an alternative to employment on the land, and thus regain a balanced economy. Owing to the mechanisation of agriculture, we cannot expect more than one-third (on average) of the working population of the countryside to be so employed. I think employment should be found in small manufacturing and service industry for a further one-third, located within 5 miles of a country town or key village. Two-thirds actively employed on the spot in this way will provide, I suggest, the foundation of social stability. I do not think it should be less.

(c) Delegate local government powers from the County Council to County Area Councils and Parish Councils, in order to engender a sense of executive responsibility.

(d) Retain Primary and Secondary Schools as essential village institutions, consistent with sound education, and encourage the idea that they should form part of village Centres—places which provide the accommodation and facilities for all the social, educational and allied activities in that area. This is economic in terms of money and effort, and would, I believe, help powerfully to engender a sense of civic or village pride and awareness.

(e) Assist village institutions to survive by reasonable grants towards capital outlay and maintenance, at any rate until the village has regained its economic stability, and can shoulder its burdens unaided.

(f) Likewise encourage the provision of facilities, such as electricity, water and sewerage—subsidies will be inevitable for some time to come—so that the standard of life in countrv and town are at least comparable, if never equal.

In general, therefore—deliberately to pursue a policy of concentration of social and economic resources in country towns and larger villages, and never to allow adventitious developments to call the tune, as has so often happened in the past.

And my final word, you must plan *economically* for a *social* purpose. Without a balanced economy, the village will be unable to survive as a social unit.

Discussion

MR. R. W. DALE, AMIMUN.E, county planing officer for Somerset, proposing a vote of thanks said that with the increasing amount of leisure arising from industrial mechanisation and automation, he thought people would choose the country instead of the town to live in and there would arise a new form of country life not linked with agriculture. In regard to the powers of the parish he believed it should have more effective work to do but he was a little hesitant about village development plans. If they were an urban district they would plan to become a county borough. Every parish left to itself would plan to become an urban district.

MR. G. BROOKE TAYLOR, public relations officer, Hemel Hempstead Development Corporation, who seconded the vote of thanks, spoke of the importance of transport and the increasing part it was playing in the daily lives of country folk. This situation raised the question of whether rural England as they knew it, could survive at all. The suggestion that industry should be encouraged to the larger villages to aid local employment would mean that the attitude of the villagers would have to be more inclined to industrial work.

MR. ERIC BELLINGHAM felt there was great scope for big motor manufacturing concerns to establish sub-assembly plants to give employment in rural areas.

MR. J. C. CRAIG, ARICS, made the point that they were in for an age of material progress, and there was going to be more and more of it. This meant that the general character of the countryside would inevitably change.

A view from the south-west of the small-scale research laboratory at Pilkington Brothers' new research centre, Lathom Park, near Ormskirk in Lancashire. It is a four-storey building with floor areas divided into bays of 13 ft. 4 in. by 26 ft. 8 in. A horizontal service duct runs the full length below ground level and services are distributed in ducts which rise vertically to the roof. The architects and consultants are Courtaulds Technical Services Ltd., of Coventry, and the contractors, Holland & Hannen and Cubitts (North West) Ltd.

Town Planning Decisions

'A Tall Block would Injuriously Affect Rural Atmosphere'

A SCHEME for the construction of an 11-storey block of 100 flats on the Queen's-road Estate, near Richmond Hill, Surrey, has been rejected by the Minister of Housing and Local Government following a public inquiry into an appeal by Mr. R. J. Wood, ARIBA, on behalf of Russells (Tulse Hill) Ltd.

The appeal site, which comprises approximately 2¼ acres of land, lies at the southern end of Queen's-road, on the eastern side, and backs on to Richmond Park. For the appellants, it was stated that in the overall scheme prepared by Messrs. Dawbarn and McDonald for the development of the whole of the Queen's-road Estate, a tower block had been shown at the southern end of the estate near the site of the proposed 11-storey block of flats. The Royal Fine Art Commission had objected to this and indicated that a building of reduced height, with a larger superficial area, would be more appropriate.

Second Proposal Submitted

The scheme which was the subject of the present appeal was the second proposal submitted to meet the council's requirements for residential development at about 88 persons per acre to fit in with an overall scheme. There had been constant discussions over many months with Richmond Borough Council; all working drawings had been produced and thousands of pounds had been spent in preparing the tender.

The proposed block, set obliquely to the park and away from Queen's-road, would be 260 ft. long, 94 ft. to the wall-head and 100 ft. over the roof erections. The block would have no adverse effect architecturally on surrounding buildings; no windows would overlook adjoining properties, except obliquely; and it would be shielded from a very large area of the park by a 60-ft. wide belt of deciduous trees.

If two six-storey blocks were to be built on the site it would involve cutting down more trees and building nearer Queen's-road. It would also mean a greater coverage of the site and more cost to the developer. The single block proposed offered a better architectural solution owing to the levels of the land, and was cheaper. Building across the contours was not a good solution.

MoW's Objection

The proposal, said the appellants, was supported by Richmond Borough Council, and the Royal Fine Art Commission had no objection. The Ministry of Works considered that the height and bulk of the building should be reduced owing to its nearness to and effect on Richmond Park, but they had not given any facts to support their objection. They had not objected to eight or nine-storey blocks reaching a height of 80 ft. on the same site.

On behalf of the Richmond Borough Council, as trustees of the land, it was stated that in order to obtain the best possible development of the Queen's-road Estate the technical experience of Messrs. Dawbarn and McDonald had been obtained. The public and Press had been fully informed at every stage, and no criticism had been made of the Dawbarn/McDonald report or of the model and perspective drawing. It had been decided that development of the appeal site should be in accordance with the views of the Royal Fine Art Commission and that the rest of the overall plan should be adopted for the remainder of the estate. The properties in Chisholm and Cambrian-roads could remain for perhaps 20 years.

The Queen's-road Estate was held in trust for charitable purposes and the income used for the general relief of rates. There might, therefore, have been some criticism if the highest tender, that submitted by the appellants' clients, had not been accepted. The scheme under inquiry would give an excellent start to the development of the estate, and it fitted in with the Dawbarn/McDonald report. The Ministry of Works' alarm was unjustified, since the proposed building was only half the height suggested in the report.

Financial Considerations

For the local planning authority (the Surrey CC) it was pointed out that as trustees for the parish it was the duty of the Borough Council to obtain the best price for the land. The Surrey CC's objection was for those in nearby houses and for the users of Richmond Park, which would be adversely affected by the proposed block.

It was their opinion that it should not be allowed.

The Royal Fine Art Commission had previously made clear their dislike of the 11-storey Roehampton blocks and later had objected to any tall block on the appeal site. Their approval of the proposed building was therefore difficult to understand. The flats would have a longer life than the trees, and the screen which the latter provided would be available only for a limited time. A better solution might be a block across the contours, say, six storeys at one end and seven at the other.

In his report to the Minister, the Inspector said that the most important point, in his view, was that the bulk of the proposed block would be oppressive in relation to Queen's-road and the development in Chisholm-road which was to be retained. In his opinion it was essential that the development of the appeal site should be properly related in siting, shape, architectural treatment and density to the development of the Queen's-road Estate as a whole, and therefore development on any part of the estate should be deferred until an overall scheme had been agreed. He therefore recommended that the appeal be dismissed.

The Minister noted, in the course of his decision, that the proposed block would be visible from some points in Richmond Park, more particularly in winter, and he thinks that it would be bound to affect injuriously its rural atmosphere. The Minister agreed with the Inspector but thought that any development of the appeal site should be substantially lower than 11 storeys, and should not include a tall 'point block.' For these reasons he dismissed the appeal, without prejudice to the submission of revised plans.

The Minister agreed with the Inspector that the development of the appeal site should be properly related to the plan for the area as a whole. He suggested that this should now be discussed with the local planning authority, and that a revised scheme for the appeal site should be drawn up in accordance with an agreed plan for the whole area. In view of the importance of the site and the widespread public interest, he asked to be informed about this plan, when agreed on, before any planning decisions were taken.

Residential Development and the Quinquennial Review

THE MINISTER of Housing and Local Government has partially allowed an appeal by R. J. Clarke (Builders), Ltd., the prospective purchasers of the land, against the refusal of the planning authority to permit the residential development of three parcels of land extending to 1.64 acres in Braemar-avenue, Sanderstead. The appellants proposed to erect three pairs of semi-detached and four detached houses on the land, which runs parallel to the railway and has been used as allotments in recent years.

The County Council had refused permission on the grounds that the land was too narrow and uneven to be suitable for building purposes and also because it was scheduled for railway use, but at the inquiry which was held into the appeal it was stated that British Railways no longer had any use for the land.

In his report to the Minister, the Inspector expresses the view that the southerly parcel is unsuitable for houses owing to lack of depth, but that the two northerly ones would provide plots of adequate size which could be easily screened. The appellants' proposal, however, necessitated an amendment to the Development Plan which, although small, affected a focal point of West Sanderstead, and he therefore considered that a decision regarding the future use of the appeal site should not be decided now, merely as the result of a planning application, but should await the quinquennial review of the Development Plan.

The Minister states that he agrees with the Inspector in respect of the southerly parcel, but in giving permission for the erection of three pairs of semi-detached houses on the two northerly of the three parcels of land, he says that such a development would involve only a minor departure from the provisions of the Plan and that a decision need not therefore be postponed.

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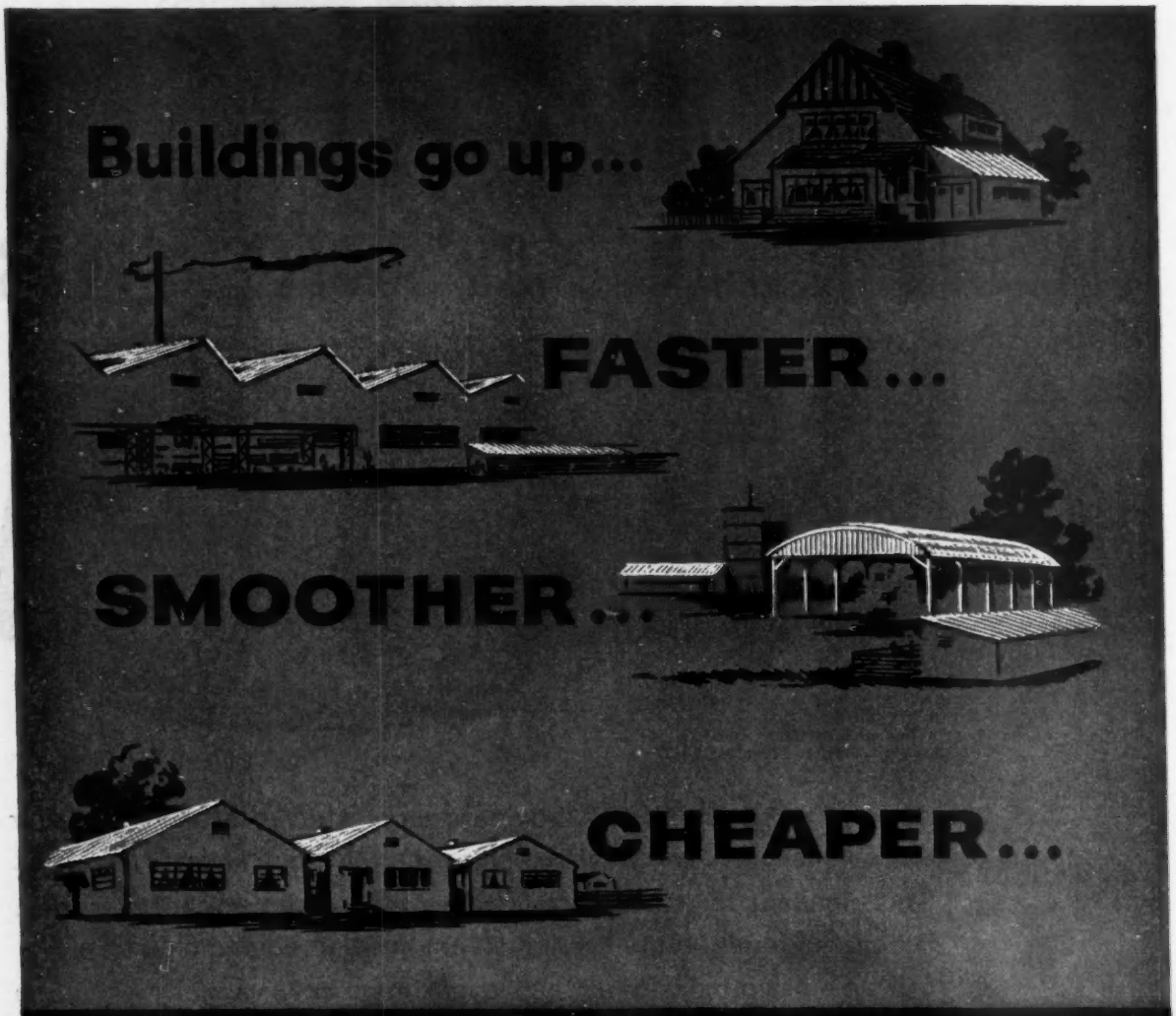

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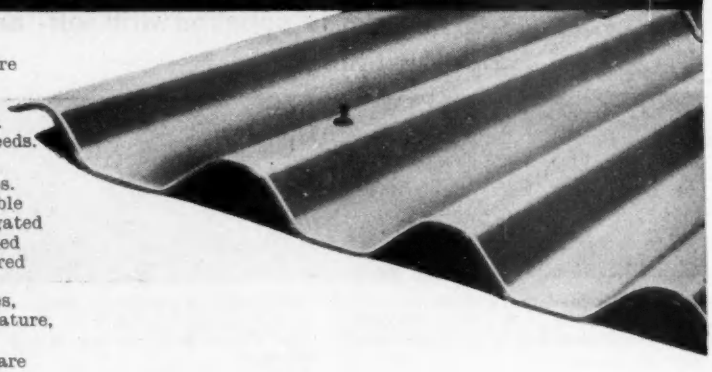

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Post-War Progress in
Building Techniques

A Review of the Industry's Response to Challenge

Addressing the fourth meeting of the 1959/60 session of the Chartered Auctioneers' & Estate Agents' Institute at 29 Lincolns Inn Fields, WC2, on February 4, Mr. R. W. Wates, JP, said that the salient features of the building industry's progress in the last fifteen years were first, the increase in the skill of management; second, the closer interplay that is emerging between design and construction; and third, the enormous improvement that has been made in builders' plant. Extracts from his paper are given below.

IN OUR DENSELY populated country, with its extremely limited land resources, it is unnecessary to stress that we must always exercise the highest possible skill and imagination in all land development. For, on the one hand, we need to conserve the amenity of our countryside and, on the other, we need to provide for the increasing facilities required by commerce, industry and housing in an age of increasing world competition and rocketing technology. There can be no doubt about the responsibility that rests on all of us in ensuring that all development is put to its best use; in addition, however, the building industry and the professions associated with it also bear the economic responsibility of ensuring that as much real value and usefulness as possible is given.

Progress in the last fifteen years has been continuous and over a broad front, but I would say without hesitation that the increase in the skill of management has been the most outstanding aspect of post-war development. The growth of management skill finds its focal point in pre-planning, which in itself is nothing new, but the thoroughness and intensity with which we now pre-plan building operations during the pre-construction stage has almost given the word a new meaning.

Tools of Management

The programme and progress charts which now adorn our site office walls have grown up from being devices designed to confuse site visitors and are now tools of management as vital as the trowel to the bricklayer. They symbolise the universal acceptance of the truth that complex operations cannot be executed economically without thorough pre-planning.

The task is carried out by a team which consists of the general manager, the area manager who will be responsible for the management of the job from the head office standpoint, the estimators who, having prepared the estimate for the job, have the most detailed knowledge of it up to that time, the chief engineer, the plant manager who will know what is available from our resources and from manufacturers if special equipment is required and the site agent or general foreman, who will be responsible for the day-to-day running of the job. The last-named is a most important member of the team, for during the pre-planning period he will be able to visualise the problems presented by the job and eliminate them wherever possible.

The team's objective is to assess the present stage of design and in the light of this assessment to decide upon the methods that will be employed. Then, having settled upon the building method, to work out a detailed programme showing each stage of the building right through from excavation to handover and, from this programme, to make sure that drawings, materials, equipment, plant and men will flow smoothly on to the site in accordance with this preconceived programme.

When this team has finished its work, they will know, so far as the drawings permit, exactly in what way they will construct the building and to what degree the work can be mechanised. This implies that they will know what machinery and equipment will be required, what labour forces will be necessary and the number of man-hours that will be consumed in each operation. They will have advised the architect and engineer of the dates by which the various detailed drawings will be required and when the contracts must be placed for the specialist sub-contractor items that are beyond the builder's direct control.

All this pre-planning is aimed at securing the utmost economy once the building work starts and in ensuring that the maximum speed of construction is achieved from start to finish with the lowest possible labour force. This objec-

A rail-mounted crane used to lift precast units into position from the delivering lorry during construction of the Roehampton flats for the LCC

A tower crane used during the construction of an office block on a congested city site in Cannon-street, London, EC. The crane is positioned at basement level in a part of the building which will eventually be decked over

The design of the new American Embassy building in Grosvenor-square, W1, incorporated many types of concrete units. This called for a great deal of precision to ensure accurate fitting

Construction techniques used on the Brandon Estate, SE17, included bracket scaffolding, a tower crane and a climbing crane which is shown in the centre of the middle block

tive is only possible if the right materials coincide with the right labour and the right plant at the right time.

The selection of building techniques for each job, the problems of plant selection, the control of an ever-growing team of specialist sub-contractors and the management of faster and faster building jobs all demand a team of skilled, highly imaginative, intelligent and flexible technicians. It has often been difficult to meet these demands, but I am glad to say that the post-war years have seen the introduction of many new training schemes by the technical colleges, trade associations and other bodies. The various courses are annually growing in number and popularity. They have supplemented our own internal training programmes and have been of enormous benefit. It takes eight or ten years for the fruits of a management training programme to be reaped and with the perpetual need for increasing skill, whilst I cannot say that we are over the hump, I can at least say that the future is brighter than ever.

It is one of the peculiar features of the building industry that, more often than not, the design of a project is completed without reference to the builder. As a consequence, in too many cases, he has little or no opportunity of making any suggestions about such matters as methods of construction, planning, cost control or the appointment of specialist sub-contractors, although his experience in these matters may be invaluable.

As things are, with much of our work obtained by competitive tender on a bill of quantities system, at the time of the acceptance of our tender we often have only a sketchy idea of the buildings we have committed ourselves to construct. When we remember that planning, which includes such fundamentals as the selection of plant and, in the case of tall buildings, lifting plant in particular, it is clear that this situation produces many difficulties. With design and construction handled separately, it is often too late at the time of the placing of the contract, to integrate the two sufficiently well to secure the maximum building economy.

A simple example of this arises in those cases where a tower crane is to be employed. If once it is decided to lift something, to reduce time and cost, it obviously pays to lift the largest sized component that is possible within the capacity of the crane. In turn this demands careful integration of pre-cast concrete into the design. This is particularly important today when reinforced concrete has largely superseded structural steel on grounds of economy and speed. The earliest collaboration, therefore, between designer and builder can often save the owner a great deal of money.

Designer/Constructor Collaboration

Undoubtedly there is room for much progress in designer/constructor collaboration. Many people on all sides of the industry are coming to realise that there are costly shortcomings in our present practice of splendid isolation. Much thought is being given to the problem and recent years have produced an increasing number of examples where the building owner has obtained all the benefits of competition between firms of equal ability and at the same time has secured the advantages of complete contractor collaboration from the design stage through to completion.

Enormous progress has been made in the improvement of builders' plant, but by far the most striking has been in the sphere of materials handling. Undoubtedly the greatest and most dramatic advance has been in the introduction of the tower crane—a tool which, by its domination of the London skyline, is becoming very familiar to the general public.

Perhaps I could best sum it all up by quoting from my own experience of the trend of costs of multi-storey flats. In the past five years building materials and building labour have advanced in cost by something over twenty per cent. Despite this advance in the index, in actual fact the cost per foot super of the flats we are building today is within a few pence of the cost of five years ago. It can be said, therefore, that the influence of higher management skill and the better understanding of the inter-play between construction and design have resulted in substantial cost reduction.

Institution of Municipal Engineers

Spring School Programme

THE great number of applications for places at the Institution of Municipal Engineers' biennial spring school, to be held from March 2 to 4, has necessitated a change of venue to provide more accommodation. The school will now take place at the Connaught Rooms, Great Queen-street, London WC2, instead of at Holborn Town Hall as originally arranged.

The biennial school has been organised jointly by the Metropolitan, Eastern, South-Eastern and South Midland Districts of the Institution of Municipal Engineers. The programme will be as follows:—

March 2, Highways.—'Motorways Construction,' by Col. Ffolliott, County Surveyor, Hertfordshire CC; 'City Traffic,' by R. Nicholas, CBE, City Engineer & Surveyor, Manchester; 'The Design of Road Improvements in an Urban Area,' by S. E. French, London CC.

March 3, Housing and Town Planning.—'Civic Design in Magdalen Street,' by Professor Misha Black, OBE, Professor of Industrial Design, RCA; 'Current Planning Problems,' by J. G. Jefferson, County Planning Officer, West Sussex CC; 'Town and Country Planning—its importance as a function of the Municipal Engineer,' by S. G. Wardley, City Engineer and Surveyor, Bradford; 'Works Study—Housing Repairs,' by J. A. Kenyon, Borough Engineer and Surveyor, Middlesbrough.

March 4.—'The Treatment and Disposal of Sewage Sludge,' by W. Fillingham Brown, Consulting Engineer; 'Refuse Collection and Disposal,' by P. V. Marchant, Borough Engineer, Surveyor and Architect, Wandsworth; 'Paints for Municipal Use,' by Dr. C. A. Chaplin, Deputy Scientific Adviser, London CC; 'Landscaping—Tree Preservation,' film by Civic Trust, and talk.

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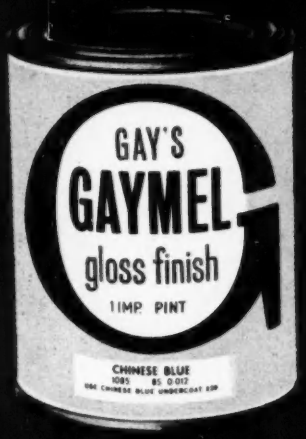

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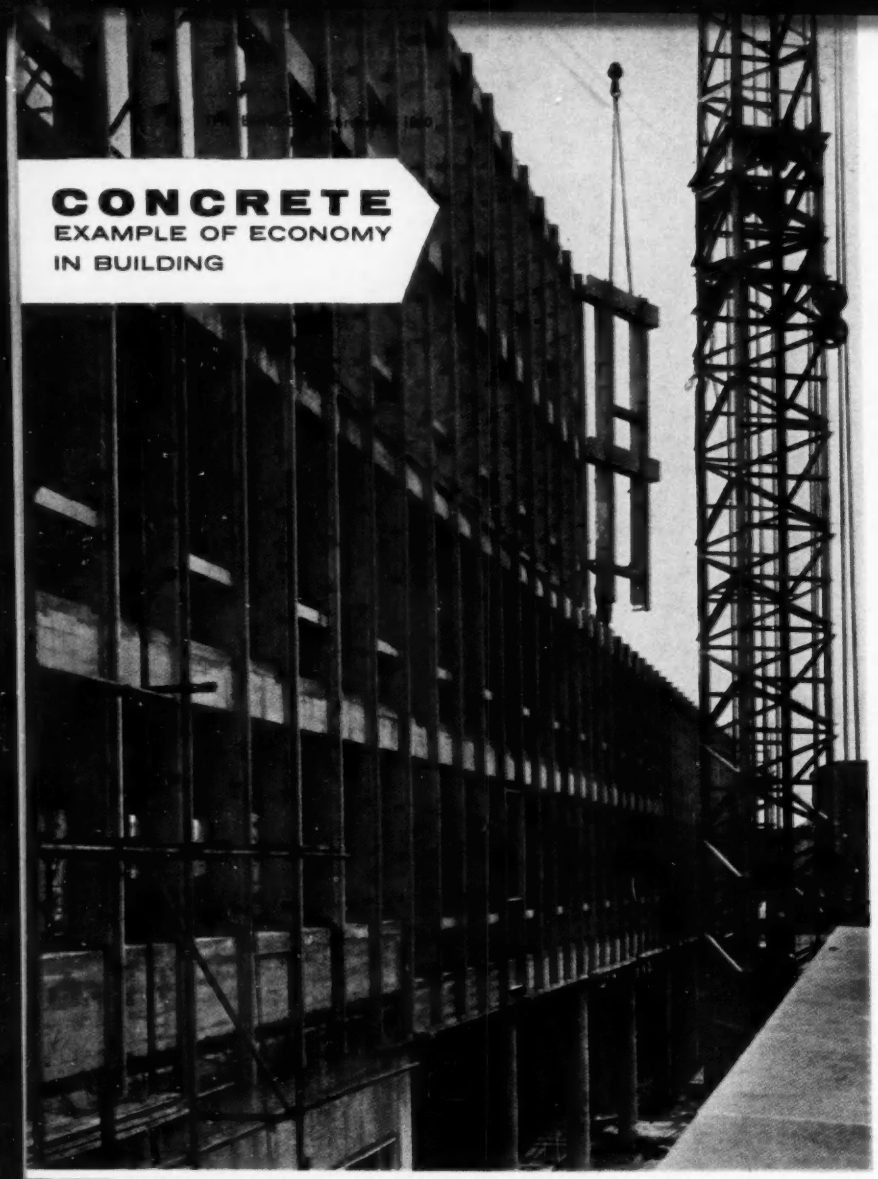


Coventry College of Art and Technology

The precast concrete frame of this building was constructed at much less than usual cost. This was achieved by early consultation and close liaison between architect, consulting structural engineers and the Bison organisation and the use of single and double H-frame construction, spine beams and spine columns.

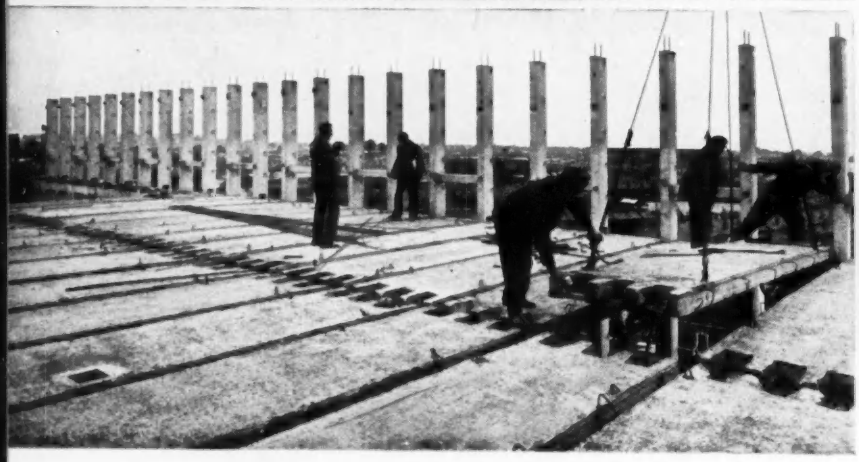
The main block is 180ft. long and 40ft. wide, with fair-faced round-nosed exposed mullions at 4ft. centres. Constructional stiffness is provided by means of the two end walls and the precast lift and staircase wells. Each suspended floor acts as a horizontal wind girder, construction consisting of 3ft. 6in. wide Bison hollow prestressed units with 6in. wide *insitu* concrete joints between, these being aligned with the mullions. Stirrups, projecting from the precast floor slabs, transmit the horizontal wind shear. Horizontal steel is used to tie the H-frames together and also to tie them into the *insitu* joints.

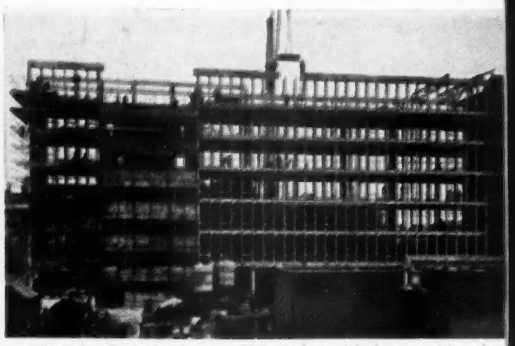
The mullions are integral with the H-frame, thus avoiding the use of artificial mullions. One result of the architect-engineer co-operation was establishment of practicable mullion shapes and tolerances, these being designed exactly to produce the desired architectural features.

By using a slightly tapered, instead of square mullion nose, it became possible to employ permanent steel moulds during precasting. This development rendered possible exact repetition of every H-frame and gave an almost perfect line through the 6-storey elevation of each mullion. Two moulds were found to be necessary for production of the 120 H-frames employed in construction, thereby enabling unit costs to be vastly reduced.

Almost complete absence of scaffolding for the east and west elevations was another factor in low overall cost, as was efficient progress and erection organisation which resulted in erection of precast units on the day of delivery.

Architect: Arthur Ling, B.A., F.R.I.B.A., Coventry City Architect
Consulting Structural Engineers: Husband & Co.
Contractors: W. H. Jones & Sons.
Manufacture and Erection of Concrete Frame: Concrete Limited.





TOP LEFT: *Typical two-storey H-frame being lifted into position, show repetition along main elevation.*

ABOVE: *General layout of precast concrete H-frame between first floor roof.*

LEFT: *Precast prestressed concrete floor slabs being fixed, showing project stirrups. About 400 floor slabs of this type were used.*

BISON floors, beams and concrete frame structures

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CON. 134

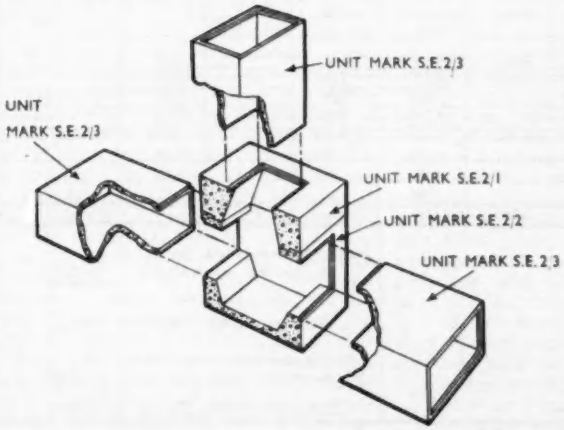
Edmund's Tower, Harlow, a 12-storey block in which the 'Se-Duct' system was recently installed

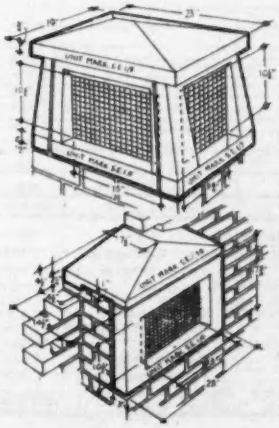
THE 'SE-DUCT' developed by the South Eastern Gas Board is basically a vertical shaft running through a building, open at top and bottom, to which sealed combustion chamber gas appliances can be fitted. The system is designed specifically for water heating and space heating appliances in multi-storey dwellings, and the first installation was completed recently in Edmund's Tower, Harlow, for the Harlow Development Corporation. The duct and appliances function independently of the ventilation of rooms and the building as a whole. Among the advantages afforded by the system, are economy, flexibility, and the control of running costs by each individual tenant. In the Edmund's Tower scheme, a 12-storey block containing 46 flats, the appliances are an Ascot 727 multipoint which provides hot water to the bath, lavatory basin, and sink, and a Sugg Halcyon selective air heater. Damper control allows full heating for one room, or background heating for the whole dwelling. Average runnings costs for heating and hot water are 11s. to 12s. a week per flat. The total value of the appliances fitted on the 'Se-Duct' is about £5,000, and the block is carcassed for cooker, wash boiler and gas refrigerator connections.

The duct is built up from precast refractory concrete units, manufactured by True Flue Ltd. The size of the duct is related to the number and type of appliances fitted to it. There are three standard size units manufactured which cater for most requirements in blocks of flats up to 16 storeys.

'Se-Duct' Flue System for Tall Flats

Below, some of the precast duct units which allow a flexible arrangement of horizontal runs into the main vertical shaft. Centre, the air inlet and outlet units for the base and top of the shaft. Right, compact housing of the Ascot multipoint and Halcyon space heater, with warm air vents above and below the cupboard





A Building Firm Steps Out

The Case History of A. Head Ltd.

4. *William Takes A Sight*

Albert Head, Limited have (with the help of the Building Advisory Service) streamlined administration and reduced it to a tidy chart. But charts only tell where to go; the navigation has still to be done. In the last instalment of this series (by Mr. Cecil A. Francis, head of BAS) we saw how Albert Head, the Managing Director, and Tom Head, now Construction Manager, worked out their respective positions and responsibilities. In the chapter which now follows, William Head, responsible for estimates, checks his position. Earlier instalments of this series appeared in 'The Builder' *of January 15 and 29 and February 12*

ALTHOUGH WILLIAM HEAD was now getting a stream of facts, it was only making his estimating more accurate, and was not to any extent speeding up his work.

For a week, William's work was studied. He followed the pattern common to many estimators. With a pile of scrap-paper he methodically worked out a price for each item, for which he had full information. He also made a note of what he wanted to sub-contract or to get a quotation for material. Whenever he was tired of doing figures, he wrote out his inquiries.

At the end of four days, he had completed everything possible, but there were a shocking number of gaps which prevented any further work. Material prices would start to arrive in about seven days, and sub-contractors a little later, but until most were received and a comparison made, little could be done. The tender had to be in by the Tuesday of the third week. Thursday, Friday and Saturday morning of the second week was a mad rush, and what remained William took home for the week-end. On Monday morning it was complete, merely wanting to be added up. Unfortunately, the comptometer operator wanted to get on with her wages calculations. A bit of overtime and the finished job ready for Albert Head's inspection at 10.30 a.m. Tuesday. Albert thought it was a bit high—'cut the prelims a bit and knock 6d. a yard off the excavation and we should be OK.' The alterations were made, and by using a fast car the tender was in by 11.45 a.m. William explained that this was not normal, very often they got it in the day before, or were able to post it to arrive first thing on the day stipulated.

Whilst William had been busy with his figures, an examination of his previous tender lists was made. It appeared that normally only 1 in 10 tenders stipulated a priced bill with the original tender. At odd periods this figure rose to 3 in 10, due to quoting for the local council. Was this the key to the whole question?

If it had been put to William like this, it would have received the terse answer which most apparently silly questions

OUTLINE of THE CONTRACT — PLANNED DISTRIBUTION OF EXPENDITURE — FOR A CONTRACT

LOCATION — WORKS NUMBER — DATE

DETAILS	SUB-CONTRACTORS: DIRECT	SUB-CONTRACTORS: NOMINATED	PROVISIONAL SUMS	PRIME COST SUMS	PROVISION FOR EXPENDITURE ON Co's WORK: MATERIAL	PLANT & TRANSPORT	LABOUR	SITE OVERHEAD	ATTENDANCES ON TRADES	PLANNED GROSS MARGIN FOR H.O. OVERHEAD & PROFIT: DETAIL	TOTAL	NOTES
DIRECT SUB-CONTRACTORS												
1	2110									106		
2 (BY TRADE)	4975									248		
3 & (BY FIRM)	695									38	389	
NOMINATED SUB-CONTRS												
1		5500							50	P/P 275		
2 (BY TRADE)		3500							125	P/P 175		
3 & (BY FIRM)		8000							175	P/P 400	850	
SUPPLY SERVICES P.S.												
GAS			3100						125	60		
SEWER			150									
WATER			120									
ELECTRICITY			240								60	
PRIME COST SUMS												
1				150						24		
2 (BY TRADE)				750						48		
3 & (BY GOODS)				175						25	97	
PRELIMINARIES						500		2425				
INCREASED COST OF LABOUR							500					
" COST OF MATERIAL					1000							
Co's TRADES: EXCAVATOR					250	445	750	120		278		
MOTOR DRIVER					2958	128	1980	400		1425		
CARPENTER					4500		1810	375		850		
BRICKLAYER					15600		7800	2000		6250		
PLASTERER					3910		1820	430		955		
PAINTER					5955		3750	900		1925		
DRAINER					1071		870	175		275		
SITE WORKS					2474	275	750	200		630	12925	
EXTRA WORKS 1	50				85		25	10		18		
2 BY TRADE					120	5	37	12		45		
3 BY FIRM				55	155		49	21		P/P 20	83	
	7830	17000	3640	1130	50370	1375	19861	7188	475		14406	

SUMMARY

DIRECT SUB-CONTRACTORS	7830
NOM. SUB-CONTRACTORS	17000
PROVISIONAL SUMS	3640
PRIME COST SUMS	1130
COMPANY'S MATERIALS	50370
" PLANT & TRANSPORT	1375
" LABOUR	19861
" SITE OVERHEADS	7188
" ATTENDANCES	475
PLANNED GROSS MARGIN	14406
GROSS TENDER VALUE	121275

LESS PROVISION FOR HEAD OFFICE OVERHEADS	6450
GROSS PLANNED PROFIT	7956
LESS ALLOWANCE FOR END OF CONTRACT MAINTENANCE	960
NETT PLANNED PROFIT	6996

get, but by leading him along a logical path, his answers not only arrived at the solution but also convinced him that the system would work. After all, they were his answers!

He had been asked to quote—for what? Doing a job. What did that job consist of? Excavation, brickwork, joinery, etc. Was there any other way of looking at it? A lot of thought here and finally—yes, labour, materials, plant, transport, overheads and profit. How many of these were variable? After a couple of false starts, only one—profit. Could we therefore work up what would, in fact, be a bill for each? Yes, but it would be five times as much work. How did he now get his price? Worked it out on scrap-paper. But how? Well he worked out the unit labour cost (or got what he could from his new Work Value cards), added the cost of materials, plant, etc., and got the unit rate. Would it be possible not to add them together on the scrap-paper, but enter them separately on a sheet of paper, or on the back of the previous page of the bill?

Yes, he often did that with particular items he wanted to remember. What did he include for overheads? A percentage of his own labour cost. Therefore if he had the total cost of his own labour, would he be able to complete his overhead column? Yes. Had his calculating machine got a storage register? Yes. Basically these answers were the solution of his problems. 90 per cent of his work could be done at the time he received the tender.

So William worked out a drill. On the first day, he would extract quantities and details of materials for which he required prices. These would be given to the buyer. Sub-contractors' sections of the bill would be photo-copied and sent out by clerical staff. To save ruling up the reverse side of bill pages, a 'Rate Analysis' page was run off on the duplicating machine. These forms could then be inserted between every page, but, in practice, it was found easier to keep them separate as another 'bill.' The form had columns for: bill item and quantity, labour, material, plant and transport rates, site oncost, overheads, profit, total rates and notes. It fitted a sheet of foolscap quite neatly.

Going Through the Bill

William had now to go through the bill. He could price all his own labour, plant and transport, and site oncosts. As soon as a trade was completed, the sheets were to be passed to the operator on the calculating machine. Taking one column at a time, she multiplied an item and transferred the result to the storage register. She multiplied the second and transferred that, and so on. At the end of the trade she had the total labour cost for that part of the bill, which she transferred to an abstract. If the 'material' column was complete, she did this in the same way and followed up with the plant and transport column and site oncost. At least 80 per cent of the work was done in the first week, and as soon as further information became available, it was dropped into place. Had this been the bill studied originally, and circumstances the same, the last items would have gone in on the second Thursday, and the complete abstract been ready for Albert Head's approval on Friday morning.

A 'Catch' Suspected

As it was, William was 'sold' on the scheme, but for him it was so revolutionary that he thought there must be a catch somewhere. Accordingly he went quietly to work on his next tender with all his fingers crossed. There were, in fact, only one or two very minor snags, and the complete abstract was ready before the end of the second week.

How William kept his 'secret' without exploding will never be known, but it was completed on a Wednesday, which gave him just nice time to work in his 'moment of truth' at Thursday's meeting. When item 2, 'tenders received and action' was reached on the agenda, William quietly passed over the abstract (see illustration) to Albert. He studied it for two or three minutes and then passed it to Tom, with the remark that it was his fault; he'd asked for facts, and, by golly, he'd been given them. Then, just to show his authority, he said he thought they ought to knock off the odd £275. He was more surprised than ever when William did not protest that he would have to alter rates. It took William quite a time to explain that if they got the job, he would relate the profit margin as a percentage, and include it when the calculator operator extended individual items of the bill.

While this was going on, Tom had been studying the abstract, and also the rate analysis sheets. He soon discovered that if he took an hourly rate for labour, he could easily forecast the volume of work for each trade, and provide a basis for planning.

During the following week, one would have thought this was the first contract the firm had ever obtained. Everybody wanted to borrow the abstract. Tom wanted to make a rough preliminary plan; Fred wanted to know why joinery site overheads were so high; Albert just wanted to study it quietly, and find out if it was as foolproof as it looked. Nobody could deny that it had saved considerable time and trouble at the estimating stage. Nobody could deny that here were facts about things which hitherto had been vague guesses.

Having provided figures of what we think we can do, it is essential to know how correct these are. What figures are wanted? So far as Albert Head, Ltd. is concerned, first and foremost are those which enable Albert Head to manage his company and its work. He does not want detail; he is not concerned whether Bill Smith was away for a couple of days last week, or that the plumbing on such and such a job barely recovered its cost. To control the constructional side of the business, he wants a summary of all contracts each month, showing their value and their profit margin. If any are not showing the anticipated margin, he will call for details.

Tom Head, being responsible for producing results and having to control his contracts managers, will want more detail. Not only will he require to know the profit margin on each contract, and the cost of sales on jobbing work; he will want to know the breakdown of that cost. Labour, materials, sub-contractors, etc., are important to him. What is possibly more important, is that he must have these costs regularly and promptly.

Further down the line, the assistant contracts managers and general foremen should know what is expected of them, and how they are measuring up to programme. Money figures will not help them a great deal—hours of trade, labour, and quantities of material, are of greater use. In this case, they should have them before they start work. It is not a great deal of use blaming someone for taking 200 hours instead of 100, if he has not been told it is expected to be done in 100. Mr. Parkinson has written a good book on this, so Tom had heard.

Some of these figures can be provided by the Accounts Section; others must be provided by Tom Head's head office staff. It will involve planning of contracts; it could involve a bonus scheme; measuring work done must be regular and accurate; and above all, costing must be up-to-date. How up-to-date? If a contract is measured today, the cost of that work, broken down to major items of expenditure—labour, materials, plant and transport, etc.—should be in the hands of the contract manager the next day. It should also be accurate to the odd £1 or so.

Speeding the Account

It was more than fortunate that Albert Head met old So-and-So at the Management Conference, as otherwise he would never have been convinced that this could be done. 'But,' he protested, 'Brooker and his assistant have been doing these accounts for years, they know them inside out, and even when I breathe fire they take a week to get them out. Even then neither of us are sure they are reasonably accurate.' This statement was true, but what he did not appreciate was that Brooker and his subordinates did not get the information they required; had to chase around the firm to find out who had ordered items, send invoices to the various executives for authorisation, and then chase around to get them back; fill their cost ledgers with masses of information which nobody bothered to look at, or only looked at when the final account did not show a profit, and then they wondered what they had omitted.

A long, long discussion with the directors ended with Albert Head remarking: 'If you can do what you say, you can turn the place upside down and we won't hold it against you if they take two days to get out a cost.'

From that month onward, the accounts department became a service to management and construction, not merely a place which prepared and paid wages accurately each week, and saw that suppliers received payment in time to claim discounts.

(to be continued)

Questions on Building Answered

A Quiz in Northern Ireland

A SPECIAL MEETING of architects, surveyors and contractors organised by the Northern Ireland Chapter of the Institute of Quantity Surveyors was recently held in Belfast. The subject was 'Questions on Building,' to be answered by Mr. Arthur J. Willis, FRICS, HonFIQS. Mr. G. P. Bell, BArch, ARIBA, AMTPI, President of the Royal Society of Ulster Architects was in the chair. Some of the questions and replies were:

What views have you on the future of the industry? I am not, of course, a prophet and one cannot foresee the developments of science. When I started in the profession we always put in a Schedule of Daywork Rates (there was no National Schedule then) 'Horse, cart and man: per day.' No one could have foreseen the developments of the last 40 years in such things as mechanised transport and plant, prestressed concrete and plastics. One of the great difficulties of the practitioner is to keep up-to-date with new materials. The literature available is enormous. I have on occasion only learnt about a material when an architect has mentioned it (expecting me to know all about it). He probably saw it at a building exhibition or some traveller interested him. In one case I was even instructed to specify something which, on inquiry, I found was not yet in production. What we need is a digest of all the important practical developments, perfectly frank and giving trade names, merchants and manufacturers—something to save us from tackling the whole bibliography of building. To some extent this is met by the technical Press, journals of institutions and information services of federations, but some co-ordinating authority is wanted—alas, another committee!

Could not quantities be simplified? We must remember the main purpose of a bill is to give a uniform and clear basis for competitive tendering. One contractor giving a price can take what short cuts he likes, because when he comes to pricing he has an idea of the relative value of what he has left out. The Standard Method of Measurement is the work of a Joint Committee of surveyors and contractors and I think that full consideration is given to the wishes of contractors. If contractors want some shortened form, they will, no doubt, get it if they ask for it. We have the example of the 'Code' for small houses. If you want to price a bath complete with waste and overflow you can only do this by which is all the SMM bill does.

What do you think of the idea of 'teamwork'? This is nothing new. We have known it for years, but we called it by the longer name of 'co-operation.' There is the team within an office working together on a job (which is only common sense) and there is the building industry team, comprising architect (as leader), consultants, specialists, quantity surveyor and contractor. There is a call now to include the contractor at an early stage, but this, of course, upsets the principle of competitive tendering. There are, however, circumstances where the advantage of competition is outweighed by other considerations.

What happens when there is a limit of retention of £10,000 on a large contract and there is no limit specified in the case of sub-contractors? The answer is that failure to provide a corresponding maximum for sub-contractors shows lack of foresight. It may be that the whole of the retention is held from sub-contractors and none from the contractor. I think there is no answer, except amendment of the terms by mutual agreement. There can be no implication of a maximum in the sub-contractor's estimate unless provided in the acceptance or formal sub-contract.

Should cash discount be allowed in a variation account where a nominated sub-contractor has quoted net? I used to add this because the architect had in such case made a mistake in his inquiry. I did, in fact, succeed with a district auditor on the very point before the war, because I contended that clauses 21 and 22 of the RIBA contract were a warranty that quotations would be subject to the relative discounts. Lately, the view has been taken that the contractor will have had the opportunity to point out the error and have the quotation revised, and by not doing so had waived his right. There is much to be said for this, though I rather feel that it is passing on the architect's mistake to the contractor. It seems to me that it is essential for the contractor to know when he tenders exactly what discount he will get so that he can add his profit accordingly. I don't feel that he should be expected to return estimates to the architect and tell him he hasn't done his job properly!

Discounts and Purchase Tax

Should cash discount be allowed on purchase tax in the case of nominated sub-contractors or suppliers? This will depend on the estimate. If this includes purchase tax it will say either that the whole is subject to cash discount or it may state that purchase tax is net. Perhaps it is being wise after the event, but I now say in the item of the provisional sum that this includes £x for purchase tax, which will be net. The main difficulty has arisen where purchase tax is imposed on something new. The RIBA form of contract (1939) never contemplated purchase tax and when revised will no doubt make the position clear.

Should the building owner be allowed a copy of the priced bill, seeing that the prices are confidential? I can't see that you can refuse the building owner a copy of one of the contract documents which he has signed. It should be pointed out to him that the prices are confidential, as he will probably not have read all that he signed. If the building owner is a public authority, the authority will have its own technical staff who can make proper use of the prices.

How can loss of profit owing to variations be recovered? Clause 9(b) of the RIBA contract gives the surveyor a wide authority to take into account any circumstances under which work is not 'of a similar character or executed under similar conditions' to that in the contract. A two-storey building would involve a different price for brickwork from that for a single-storey building, owing to the larger proportion of scaffolding. Similarly, the omission of three storeys from the top of a building might affect rates which are applicable to all storeys. Where variations are abnormal, each case must be judged on its merits and a fair valuation made.

Is it reasonable to ask a contractor to provide a surveyor to assist with interim valuations? It is usually in the contractor's interest for his surveyor to attend at valuations and it is part of the co-operation that the quantity surveyor expects. The surveyor needs the help of somebody on the job, the clerk of works if there is one, or it may be only the foreman. Provision is sometimes made in the preliminary bill for the contractor to provide assistance, but, whether it is there or not, I think it is to the contractor's advantage to see that the quantity surveyor has the necessary information.

Should extra cost of overtime be allowed under the National Schedule of Dayworks? The Schedule says 'payments properly made in accordance with the Working Rule Agreement.' I think the full overtime rate would only be expected if the architect had ordered overtime to be worked, e.g., to expedite the work, or if there was good reason why it could not be done in normal hours.

Should not an architect have to study quantities as part of his training? I don't think the study of quantities in detail is necessary, but what he should appreciate is the nature of the work the quantity surveyor does (and can or cannot do), and the way he does it. A few lectures by a quantity surveyor and some by a builder on the professional practice subject would go a long way, probably, towards giving the architect a more realistic approach to this aspect of his work.

What is a 'qualified' surveyor? There is no registration of surveyors as of architects, though this seems to have been achieved in South Africa. The only answer I can suggest is a member of one of the several professional institutions of surveyors. (A member of the audience suggested that a surveyor could be qualified without being such a member.) Yes, of course, there have been very good surveyors not members of an Institution, but I think this is getting rare now and I

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naturally would not exclude any such. Membership of an Institution is rather on a level with the qualifications an architect needs for registration. Neither registration nor institutional membership of themselves can mean 'qualified' in the sense of 'experienced.'

There is a form of RIBA contract where quantities are not included. What is your experience of quantities not forming part of the contract? I believe that in the earlier days of this century contracts were let with the bills of quantities prepared by the surveyor but not forming part of the contract. This was before architect and client had fully appreciated the value of the surveyor. In such a case errors could not be corrected under the contract and the contractor had no remedy against the surveyor for negligence, because there was no privity of contract. I have never myself dealt with any such contract and I think they are very rare. The form referred to is mostly used where there is a specification only and no quantities at all. The wording might perhaps now be revised to 'for use where there is no bill of quantities' instead of 'where quantities do not form part of the contract.'

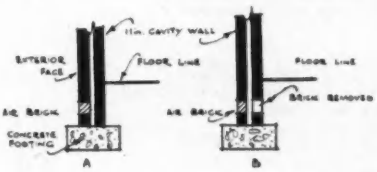
Ought not a quantity surveyor to have some training in a contractor's office to make him a proficient estimator? Ideally the quantity surveyor would have training in all crafts and branches of the industry, but by the time he had had it all it would be too late to use his experience. He is only an estimator in the sense that he analyses contractors' prices. I have always refused to do any competitive estimating for a builder. He is the only man who can decide what risks he will take and, moreover, he and his staff have all the data of current prices for their actual purchases, and they alone have knowledge of their own labour conditions. There is no such thing as a right price, in a purely mathematical sense.

Inquiry Bureau

Ventilation of a Hollow Timbered Floor; Moisture Evaporation; Unauthorised Visitors to Uncompleted Estates

QUESTION: Would you advise me which of the methods of ventilation shown in the sketch is correct? T. S.

ANSWER: The construction of the floor has not been stated, but from the right-hand sketch it might be a hollow timbered



floor. If such is the case, then ventilation under this floor is essential, but the wall cavity must not be included. A trunking or box must be formed to conduct air across this cavity to the space under the floor. A slate surround to the air vent formed would be satisfactory.

The only ventilation required to a cavity in a hollow wall is through the weep holes formed at ground level and above the door and window openings. Any further ventilation would reduce its thermal insulation properties. R.M.E.

Moisture Evaporation

QUESTION: We have recently constructed new offices with double-glazed wood sashes, painted white and secured together and into the rebates with mastic. Silica gel has been used to absorb the damp from the air space. The windows have been very effective for both warmth and for stopping exterior condensation, but we have found that on some south windows in the hot sun, the moisture apparently evaporates from the silica gel, rises to the top of the air space, condenses and in due time is re-absorbed. This causes streaks on the glass. Is there any way we can avoid this?

D. F. B.

ANSWER: I will assume that when this job was done the silica gel was used from a tin. If this was the case, then the wrong method was used. The gel should have been thoroughly dried before using, and one way of doing this would be to put it in a container and then into a warm oven thoroughly to dry. Then it should not be taken out until the last moment before using, otherwise it will again absorb damp from the atmosphere.

However, the remedy for this particular job is to take out one side of the double glazing and then either thoroughly dry the gel before re-using or purchase 'desiccators.' These are types of gel about 9 in. long by ¾ in. in diameter. They are sealed in cellophane and must not be unsealed until the last moment before glazing. Unfortunately nothing else can be done. Glass must be unglazed to effect a cure and reglazing done as stated. The main thing to remember is not to unseal the dessiçators until the last moment or if the gel already in is used, do not subject it to a damp atmosphere before using.

L. A. H.

Unauthorised Visitors on Uncompleted Estates

QUESTION: On some estate developers' sites we have seen notices erected declaring the roads to be private and not open to the general public even though purchasers of the dwellings in parts of the estate had already taken occupation. We are, therefore, wondering whether the display of such boards will afford any protection should any claims be made against us through accidents involving unauthorised persons being on the site.

P. B. L.

ANSWER: The occupier of any premises owes a greater duty of care in respect of the condition of his land to authorised visitors than to trespassers. An occupier is broadly any person who exercises over the land in question such possession and control as to be able to admit or exclude visitors. A building contractor may be an occupier if he has such control.

To authorised visitors the occupier owes a duty to take such care as in all the circumstances is reasonable, to see that the visitor will be reasonably safe in using the premises for the purposes for which he is permitted to be there. To trespassers he merely owes a duty not to prepare any trap. Accordingly in so far as there is any risk of accidents arising from the condition of the estate itself—e.g. trenches uncovered, or unsafe temporary bridges—the occupier may restrict the class of persons to whom he owes a duty of care by restricting the number of people he permits to enter his land.

Certain persons—e.g. the occupiers of the completed part of the estate and their visitors—will of course be presumed to have permission. In the absence of interruption the general public if it habitually crosses the land will also be presumed to have such permission. A notice will help to displace any such presumption, but if after the notice is erected the general public use, perhaps, a particular road as a short cut and no attempt is made to prevent this, the notice alone will not be sufficient to avoid the occupier's duty to take reasonable care.

Although a notice will alone go some way to prevent unauthorised visitors being deemed to have permission to come on the estate, it cannot afford any protection except in regard to accidents arising out of the condition of the estate. A much more potent source of danger is probably the actual carrying out of operations on the land—transporting materials for instance. In carrying out operations any person, whether the occupier or not, must exercise reasonable care for the safety of others whether trespassers or not, who might reasonably be expected to be there.

If any particularly dangerous works are being carried out a notice of warning may serve some purpose both in scaring visitors away, and even in reducing liability should an accident result from their ignoring such a notice. However, if ordinary building works are being carried out it is not possible to displace the duty that they shall be carried out with such care as, in all the circumstances, may be regarded as reasonable.

A. E. T.

THE BUILDER CURRENT PRICES

THE information given on these pages has been specially compiled for *The Builder* and is copyright. It is the intention that the details given should indicate fair average prices of materials, not necessarily the highest or the lowest. The prices apply to large quantities of materials loaded at works, delivered at London Stations or at site in London Area as stated. Prices for smaller quantities ex merchant's warehouse will necessarily be higher so as to include the stocking and handling costs involved. It is recommended that the prices of materials should be confirmed by inquiry from suppliers and merchants.

AGGREGATES AND SAND

Delivered site in full lorry loads. Average of prices for Boroughs of Westminster, Paddington, Holborn and St. Pancras.

		£	s.	d.
Pit Ballast	per yd.	1	5	5
Pit Sand	"	1	3	8
Washed Sand	"	1	6	9
¾ in. Shingle	"	1	4	3
¾ in. Broken Brick	"	1	0	9
Pan Breeze	"	1	0	6
Fine or Coarse Foamed Slag Aggregate	per ton	3	8	0

2 yds. of fine and 2.6 yds. of coarse per ton.

CEMENT, etc.

Including non-returnable jute sacks or paper bags.

		£	s.	d.
Best British Portland Cement. Standard Specification delivered Charing Cross area.				
6-ton loads and upwards, site	per ton	5	10	0
1 to 6 tons, site	"	6	2	0
Rapid-Hardening Cement in 6-ton loads and upwards to site	"	6	0	6
1 to 6 tons do. site	"	6	12	6
Aquacrete Water Repellent Cement. 32s. 6d. per ton on ordinary cement prices.				
Sulphate Resisting Cement. 32s. 6d. per ton on ordinary cement prices.				
Red, Buff or Khaki Colorcrete in 6-ton lots	"	8	10	0
Other colours according to colour.				
In 4-ton lots from 308s. 0d. to 778s. 0d. per ton.				
White Portland Cement	"	13	15	6
Under 1 ton	per cwt.		16	9
417 Cement (Ultra Rapid Hardening) in 6-ton lots and upwards	per ton	7	2	6
Super Cement (Waterproof), 32s. 6d. per ton above Portland Cement.				
Cullamix Tyrolean Finish, £11 8s. 0d. to £14 3s. 0d. (1-ton loads and upwards.)				
Lightning and Ciment Fondu Brands High Aluminous cement, 6-ton lots and up	"	15	14	6
Stourbridge Fireclay, 6-ton loads at Railway Depot, London	"	6	19	0
Stourbridge Fireclay, 6-ton loads (London sites)	"	7	7	0
Moler Mortar Powder for Flue Bricks (London sites)	per cwt.	1	8	0

BRICKS

Full Loads.		£	s.	d.
First Hard Stocks	per 1,000	15	19	6
Second Hard Stocks	"	14	3	6
Mild Stocks (Kiln Burnt)	"	10	5	0
Mild Stocks	"	10	0	0

All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job.

2½ in. Nominal Fletton Bricks to sites in W.C. district:				
Commons	"	5	18	0
Cellular Commons	"	5	18	0
Keyed do.	"	6	0	0
Rustics	"	7	10	0
Cellular Rustics	"	7	10	0
Single Bullnose Commons	"	7	12	6
Sandfaced	"	8	10	0
Tuscans	"	9	5	0
Saxons	"	9	13	0
Golden Buffs	"	10	0	0
Dapple Light Facings	"	10	7	6
Heather Facings	"	10	3	0
Best Blue Pressed Staffs (London stations)	"	30	12	6
do. do. (London sites)	"	30	14	0
do. Bullnose (London stations)	"	31	11	6
do. do. (London sites)	"	31	13	0
Blue Wire Cuts (London stations)	"	27	5	0
do. do. (London sites)	"	27	6	6
Midhurst Lime Bricks (London sites)	"	10	15	6
Uxbridge Whites (London sites)	"	10	19	0
Special Purpose Sandlime Bricks (London sites)	"	8	12	0
Best Stourbridge Fire Bricks:				
2½ in. (London stations)	"	30	12	3
2½ in. (London sites)	"	31	1	0
3 in. (London stations)	per 1,000	36	14	9
3 in. (London sites)	"	37	5	3
2¾ in. Moler Flue Bricks (London sites)	"	29	0	0
2½ in. Machine-made Sandfaced Red Facings (London sites)	"	16	16	6
2½ in. Machine-made Multi Red Facings (London sites)	"	17	1	6
2½ in. Hand-made Sandfaced Red Facings (London sites)	"	18	17	6
2½ in. Hand-made Sandfaced Multi-Colour Facings (London sites)	"	18	17	6
Hand-made Sandfaced Cherry Red Facings, Berkshire district (London sites)	"	19	13	0
Hand-made Sandfaced Multi-Colour Facings, Berkshire district (London sites)	"	19	13	0
Rubber Bricks for gauged arches (London sites)	"	49	1	3
2½ in. Surrey Clamp Burnt Multi Stock Facings (London sites)	"	14	14	0
2½ in. Surrey Kiln Burnt Multi Stock Facings (London sites)	"	16	7	0
Glazed Bricks (London sites), White, Ivory, Brown:				
Stretchers	"	64	0	0
Headers	"	63	0	0
Quoins, Bullnose and 4½ in. Flats	"	80	0	0
Double Stretchers	"	85	0	0
Double Headers	"	77	10	0
One side and two ends	"	87	0	0
Two sides and one end	"	89	10	0
Splays and Squints	"	83	0	0

Cream and Buff, £3 extra over White. Other colours, hard glaze, £8 10s. 0d extra over White. All above prices plus 32½% for Best quality and plus 32½% less 10% for Second quality.

PARTITION SLABS, etc.

Delivered Central London Area. (W.C. District.)

			£	s.	d.
Hollow Clay Partition Blocks (Keyed)					
Minimum lorry loads					
*2½ in.	140 yds.	per yd. sup.		4	5
Building Blocks (Keyed)					
*3 in. (6 cavity)	110 yds.	"		5	5
*4 in. (6 cavity)	90 yds.	"		6	10
6 in. (8¾ in. × 5½ in.)	1,250 blocks	per 1,000	26	18	0
* Half blocks at no extra charge.					
Clinker Concrete					
2 in.	100 yds.	per yd. sup.		3	9
2½ in.	85 yds.	"		4	4
3 in.	75 yds.	"		5	3
4 in.	55 yds.	"		6	5
Cranham Terra Cotta					
2 in.		"		6	9
2½ in.		"		7	9
3 in. Load bearing quality		"		8	9
4 in. do. do.		"		10	9
Moler Partition Blocks					
2 in.	150 yds.	"		10	6
2½ in.	120 yds.	"		13	0
3 in.	100 yds.	"		14	0
4 in.	90 yds.	"		15	6
Lightweight Concrete Building and Partition blocks of Various Sources of Manufacture					
2 in.	100 yds.	per yd. sup.		5	4
2½ in.	80 yds.	"		6	5
3 in.	65 yds.	"		7	5
4 in.	50 yds.	"		9	4
4½ in.	44 yds.	"		10	2
6 in.	33 yds.	"		13	5
Thermalite-Ytong Partition Blocks					
2½ in.	144 yds.	"		7	0
Thermalite-Ytong Load-Bearing Insulating Blocks					
3 in.	120 yds.	per yd. sup.		8	5
4 in.	90 yds.	"		11	0
5 in.	72 yds.	"		13	9
6 in.	60 yds.	"		16	6
8½ in.	42 yds.	"	1	3	8
Floor Blocks and Filler Tiles					
Floor Blocks 12 in. × 12 in. delivered in full lorry-loads:					
3 in.		per 1,000	34	1	0
4 in.		"	36	10	0
5 in.		"	43	15	0
6 in.		"	49	19	0
7 in.		"	61	8	0
8 in.		"	71	19	0
9 in.		"	79	3	0
10 in.		"	87	15	0
Filler Tiles in multiples of 10 tiles per 1,000 multiples:					
12 in. × 3 in. × ⅝ in.		"	42	15	0
12 in. × 4 in. × ⅝ in.		"	73	15	0
10 in. × 5 in. × ⅝ in.		"	73	15	0

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LONDON AIRPORT
Architect: Frederick Gibberd, C.B.E., F.R.I.B.A., A.M.T.P.I.

ROAD BRIDGE, TUFFLEY, GLOS.
Architects: Scott & Wilson, Kirkpatrick & Partners

AMERICAN EMBASSY
Architects. Eero Sarrinen & Associates
Assoc. Architects: York, Rosenberg & Mardall F./A./A.R.I.B.A.

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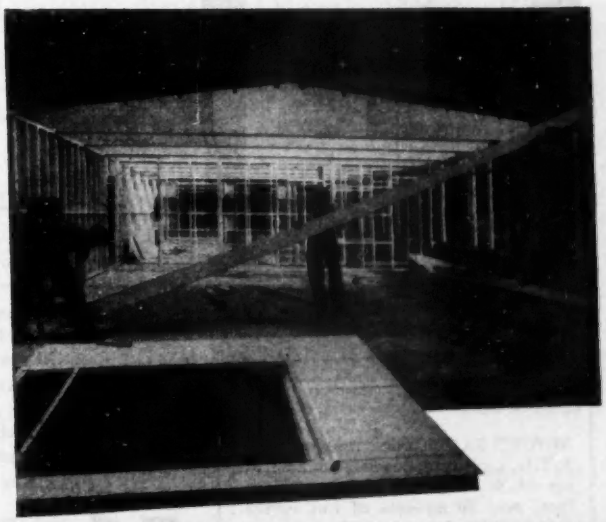

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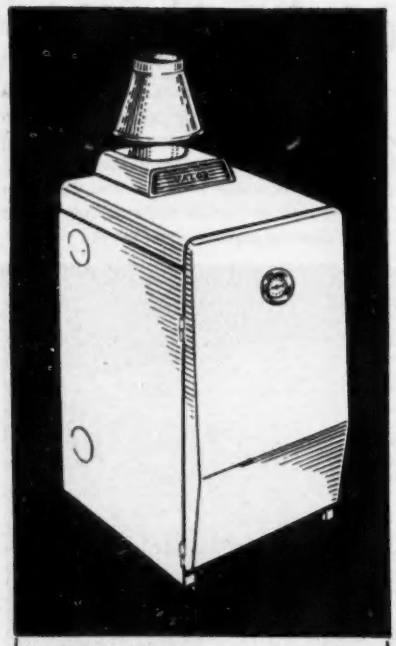


MODEL SA 35 has an output of 30,000 B.T.U.'s constant loading suitable for up to 6 radiators (150 sq. ft. surface) **and 30 gallons of hot water.** Consumption 0.1 to 2 pt.p.h.

MODEL SA 25 has an output of 15,000 B.T.U.'s constant loading suitable for 2 to 3 Radiators (50 sq. ft. surface) **and 30 gallons of hot water.** Consumption 0.1 to 1 pt.p.h.

Why Valor leads the field!

- Small and unobtrusive
- Easy to install
- Highest recovery rate of any oil-fired boiler
- Burner gives extremely economical running on kerosine (paraffin) —does not require any electrical supply
- Oil control valve incorporates an anti-flooding safety device
- Thermostat controls hot water temperature
- White stove-enamelled steel casing complete with vitreous-enamelled draught-diverter
- Dial gauge thermometer on front
- Guaranteed for twelve months

Valor OIL-FIRED BOILERS

For further details please contact:
The Valor Company Ltd., Bromford, Erdington, Birmingham 24. Tel. Erdington 6151

STONEWARE DRAIN PIPES, etc.

The following are the percentages to be added to the Revised Standard List (Nov., 1956) prices delivered London Area.
Delivered ex Merchants Wharf or Depot.

	Over 2 tons	Over 50 pieces Under 2 tons	Under 50 pieces Under 2 tons
Best Quality ...	−18¾%	List price	+5%
BSS Best Quality...	+10% −18¾%	+10% list price	+10% +5%
Tested Quality ...	+37½% −18¾%	+37½% list price	+37½% +5%
BSS Tested Quality	+47½% −18¾%	+47½% list price	+47½% +5%

		£	s.	d.
3 in. Land Drain Pipes (in 12 in. lengths)	per 1,000	11	18	6
4 in. do. do.	,,	15	19	6
6 in. do. do.	,,	32	19	0
9 in. do. do.	,,	62	9	0

DAMP COURSE

		£	s.	d.
Hessian base bitumen 7 lb. per yd. sup. in 24 ft. rolls cut to wall widths in lots of £6 value and over delivered London area	per yd. sup.		3	2
Asbestos base do. 7 lb. per yd. sup. do. do.	,,		5	2
Lead lined bitumen do. 9½ lb. per yd. sup. do. do.	,,		12	2
18 in. × 9 in. British damp course slates	per 1,000	43	8	11
14 in. × 9 in. do. do.	,,	32	8	2
9 in. × 9 in. do. do.	,,	18	18	9
18 in. × 4½ in. do. do.	,,	19	19	9
14 in. × 4½ in. do. do.	,,	15	18	3
9 in. × 4½ in. do. do.	,,	10	14	3

STONE

		£	s.	d.
Bath Stone				
Monks Park	per ft. cube		9	9
St. Aldhelm Box Ground	,,		11	0
Delivered in railway trucks at South Lambeth B.R. Western Region.				
Doulting Stone Random Blocks. Delivered London area	,,		10	4
Beer Stone. Delivered London area	,,		10	0
Portland Stone—				
Brown Whitbed in random blocks, 20 ft. average delivered in railway trucks at Nine Elms, B.R. Southern Region	,,		9	4
Yorkshire Stone—Blue Robin Hood Quality. Delivered to site London in 6-ton lots.				
9 in. × 3 in. Rubbed, weathered, throated and stolled cills	per ft. cube	4	5	10
12 in. × 6 in. do. do. do.	,,	3	1	2
12 in. × 3 in. Plain coping, twice throated	,,	2	7	6
12 in. × 3 in. Weathered and twice throated coping	,,	3	3	3
14 in. × 6 in. do. do. do. do.	,,	2	17	0
4½ in. × 9 in. Plinth rubbed on top and face ...	,,	2	11	0
3 in. sawn two sides Slabs, random sizes ...	per ft. sup.		9	1
Templates and Cover Stones, 3 in., 4 in. and 6 in. thick, edges coped for rendered brickwork ...	per ft. cube	1	11	3
do. do. fair one edge for fair faced brickwork	,,	1	17	0
Hard York—				
12 in. × 2 in. Square Steps, rubbed on top and edge	per ft. run		11	0
14 in. × 3 in. Round-nosed Steps, rubbed on top and front	per ft. cube	2	18	3
12 in. × 6 in. Plain Steps, rubbed top and front	,,	2	11	0
2 in. Rubbed and Jointed Paving, given sizes ...	per ft. sup.		10	3
2 in. Sawn Paving, edges squared, in random sizes	per yd. sup.	3	12	0

TILES AND PANTILES

Delivered London area by road in 6 tons or over per 1,000.

	£	s.	d.
Machine-made Pantiles and French pattern Tiles from Lincolnshire district	29	19	0
Hand-made Pantiles Berkshire district	55	18	0
Hand-made Double Roman Bridgwater district ...	64	4	1
Hand-made 10½ × 6½ tiles Berkshire district	15	18	3
Machine-made 10½ × 6½ Staffordshire district	15	2	6
Hand-made Hip and Valley tiles per doz.	1	11	10
Machine-made Hip and Valley tiles do.	1	10	1
Concrete tiles 10½ × 6½	8	10	0
do. Interlocking (49S)	19	16	6

NOTE.—Breakage in transit, purchasers' responsibility.

SLATES

First-quality Slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate station. Per 1,000 actual.

	£	s.	d.
24 × 12	150	19	7
22 × 12	122	14	2
22 × 11	110	16	4
20 × 12	103	19	1
20 × 10	99	11	6
18 × 10	69	2	6
18 × 9	60	11	9
16 × 10	54	8	10
16 × 8	42	12	4

NOTE.—Breakage in transit, purchasers' responsibility.

TIMBER

				£	s.	d.
Softwood		Ex Wharf	per standard	£115 to £140		
Joinery quality		do.	,,	£94 — £98		
Carcassing quality		do.	,,	£108	0	0
1 in. Tongued and Grooved Flooring		do.	,,			
Hardwood						
Mahogany—	African S.E.	do.	per ft. cube	1	10	0
do.	Honduras S.E.	do.	,,	3	5	0
Oak	European S.E.	do.	,,	2	10	0
do.	Japanese S.E.	do.	,,	3	0	0
do.	English Logs sawn ...	do.	,,	2	0	0
Teak	8 in. average S.E. ...	do.	,,	3	17	6
Walnut	African Logs sawn ...	do.	,,	1	2	6

DOORS (in Lots I–II)

Delivered London area.

		£	s.	d.
1½ in. 4 Horizontal Panel. Pattern 4 in. deal				
2 ft. 0 in. × 6 ft. 6 in.	each	1	16	0
2 ft. 3 in. × 6 ft. 6 in.	,,	1	17	6
2 ft. 6 in. × 6 ft. 6 in.	,,	1	18	6
2 ft. 9 in. × 6 ft. 6 in.	,,	2	0	6
2 in. do. but top panel open. Pattern 4 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	,,	2	9	0
2 ft. 9 in. × 6 ft. 6 in.	,,	2	11	6
2 in. 2 Panel top panel open. Pattern 2 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	,,	2	3	0
2 ft. 9 in. × 6 ft. 6 in.	,,	2	5	0

SUNDRIES

Delivered London area.

		£	s.	d.
1 in. Wood Wool Slabs 6 ft. 0 in. × 2 ft. 0 in. in quantities of 1 ton (89 yds. to 1 ton)	per yd.		6	2
1½ in. do. (67 yds. to 1 ton)	,,		8	0
2 in. do. (52 yds. to 1 ton)	,,		9	9½
2½ in. do. (45 yds. to 1 ton)	,,		11	3
3 in. do. (39 yds. to 1 ton)	,,		12	7½
Quantities under 1 ton add 1d. per ½ in. of thickness.				
½ in. imported insulation Board, quantities over 5,000 sq. ft.	per 100 sq. ft.	2	2	6
⅛ in. Hardboard do.	,,	2	0	0
5/16 in. do. do.	,,	2	17	6
1/16 in. Asbestos Flat Building Sheets	per yd. sup.		4	3½
¼ in. do. do. do.	,,		6	0
Roofing Felt 1-ply	,,		1	9
do. 2-ply	,,		2	2½
Best Scotch Glue in slabs	per ½ cwt.	5	8	0
do. pearl	,,	5	8	0
Croid Glue	28 lb.	2	6	0
Cut Nails 3 in. (1-ton lots)	per ton	78	10	0
do. 4 in. and up (1-ton lots)	,,	75	0	0
Wire Nails 3 in. (4-cwt. lots)	per cwt.	3	13	5
do. 4 in. and up (4-cwt. lots)	,,	3	12	10

METALS

STEEL JOISTS, ETC.

		£	s.	d.
Basis Joists— 6 in. × 5 in., 8 in. × 5 in., 8 in. × 6 in., 10 in. × 6 in., 12 in. × 6 in., plain cut to lengths delivered London area	per ton	48	15	6
Extra for sizes				
3 in. × 1½ in. 4 in. × 1¾ in.	,,	3	10	0
3 in. × 3 in.	,,	2	10	0
4 in. × 3 in.	,,	2	5	0
10 in. × 4½ in.	,,	1	10	0
5 in. × 2½ in. 5 in. × 3 in.	,,	1	15	0
4½ in. × 1¾ in.	,,	3	5	0
5 in. × 4½ in. 7 in. × 3½ in. 13 in. × 5 in. ...	,,		15	0
6 in. × 3 in. 24 in. × 7½ in.	,,	2	0	0
6 in. × 4½ in. 7 in. × 4 in. 8 in. × 4 in. } 9 in. × 4 in. 10 in. × 5 in. }	,,	1	5	0
12 in. × 5 in. 22 in. × 7 in.	,,	1	0	0
9 in. × 7 in. 10 in. × 8 in. 12 in. × 8 in. } 14 in. × 5½ in. 14 in. × 6 in. 14 in. × 8 in. } 15 in. × 5 in. 15 in. × 6 in. 16 in. × 6 in. } 16 in. × 8 in. 18 in. × 6 in. 18 in. × 7 in. } 18 in. × 8 in. 20 in. × 6½ in. 20 in. × 7½ in. }	,,		10	0
Steel angles average price	,,	49	15	6
Steel tees average price	,,	50	15	6
Fabricated work delivered London— R.S. Joists cut and fitted	,,	65	15	0
Compound girders	,,	70	0	0
Stanchions	,,	75	15	0
Compound stanchions	,,	80	0	0
In Roof Work—Trusses and Purlins	,,	89	17	6
Average prices not for awkward work.				
Angle cleats and ½ in., ¾ in. and ⅞ in. bolts average price London area	per cwt.	5	10	0

FERRO-CONCRETE BARS

		£	s.	d.
Mild Steel Ferro-Concrete bars British manufacture to BSS785 ex London Stock 1 in. diam., and upwards	per ton	49	10	0
½ in. diam.	per ton extra	8	12	6
5/16 in. do.	,,	6	12	6
⅜ in. do.	,,	4	12	6
⅞ in. do.	,,	3	2	6
⅞ in. do.	,,	1	10	0
⅞ in. and ¾ in. diam.	,,		15	0

MILD STEEL TUBES

Tubes to BSS 1387—1957 and Fittings. *Revised* list prices and following discounts :

Galvanised Tube—	Under 1 ton	Over 1 ton	W.I. Fittings	Malleable Fittings
Light	−39%	−40½%	Light −26½%	Malleable List
Medium	−35%	−36½%	Heavy −22½%	−23% + 40%
Heavy	−27½%	−29%		
Black—				
Light	−50%	−51½%	Light −32½%	Malleable List
Medium	−46%	−47½%	Heavy −28½%	−23%
Heavy	−38½%	−40%		

C.I. HALF-ROUND GUTTERS

Delivered London per yd. in 6 ft. lengths.

	Gutters	Nozzles	Stop Ends
3 in.	4/0½	3/7	1/-
3½ in.	4/4½	3/11	1/-
4 in.	5/8	4/5	1/7
4½ in.	6/3	4/11	1/10
5 in.	6/11½	5/4	2/2

METALS—*continued*

C.I.O.G. Gutters

Per yd. in 6-ft. lengths :	Gutters	Nozzle	Stop Ends
3 in.	5/2½	4/8	1/3
3½ in.	5/10	4/8	1/7
4 in.	6/5	4/11	1/10
4½ in.	6/11½	5/8	2/2
5 in.	7/7½	6/5	2/6

C.I. Rain-Water Pipes

	Pipe	Bends	Branches
2 in.	8/7½	4/5	6/4
2½ in.	8/7½	4/11	8/6
3 in.	9/8½	6/2	9/2
3½ in.	11/0½	7/3	11/–
4 in.	12/9	8/9	13/1

L.C.C. Coated Soil Pipes

2 in.	9/8½	7/7	9/2
2½ in.	10/4	8/5	11/5
3 in.	11/7	9/2	13/7
3½ in.	12/11½	11/5	15/10
4 in.	14/9	12/9	18/8

Above prices for gutters, rain-water and soil pipes for under 5-cwt. lots. only. Lots over 5 cwt. see List No. 3300, dated February 1, 1955, plus 22½% and tonnage allowance. 4-ton lots 5%, 2-ton lots 2½%.

L.C.C. Coated Drain Pipes

In 9-fts.:	cwt. qt. lb.	Per yd.	Bends	Branches
4 in.	1 1 17	35/3	23/9	42/–
6 in.	2 0 1	51/7	63/9	101/–

Asbestos Rain-Water Pipes and Fittings

All less 17½% discount.		2 in.	2½ in.	3 in.	4 in.
Pipes, 6-ft. lengths	per yd.	4/7	4/10½	5/11	7/10
Shoes	each	3/–	3/3	3/10	5/2
Single Branches	,,	4/8	5/6	6/7	9/2
Bends, square or obtuse	,,	3/3	3/7	4/8	6/7
Swan Necks, 4½ in. proj.	,,	3/7	4/8	5/2	7/3
do. 6 in do.	,,	3/10	5/2	5/10	7/10

Asbestos O.G. Gutters and Fittings

		4 in.	4½ in.	5 in.	6 in.
Gutters, 6-ft. lengths	per yd.	4/4	4/9½	5/9	6/10½
Drop ends	each	3/6	4/–	4/9	5/5
Stop ends	,,	1/1	1/2	1/3	1/5
Angles	,,	3/7	4/1	5/–	5/10
Nozzles	,,	3/6	4/–	4/9	5/–
Union Clips	,,	1/9	2/1	2/6	2/11

Asbestos Half-Round Gutters and Fittings

		3 in.	4 in.	4½ in.	5 in.	6 in.
Gutters, 6-ft. lengths	per yd.	3/0½	3/7½	3/8½	4/4½	6/1
Drop ends	each	2/6	3/–	3/3	3/7	5/2
Stop ends	,,	1/–	1/1	1/2	1/3	1/5
Angles	,,	2/10	3/3	3/7	3/10	5/2
Nozzles	,,	2/6	3/–	3/3	3/7	5/2
Union Clips	,,	1/3	1/4	1/5	1/7	2/5

	Per ton basis in London £ s. d.
Iron—Staffordshire Crown Merchant Quality	52 17 6
Mild Steel Bars	47 8 6
Mild Steel Hoops	49 0 0

	Ex Merchant's Stock per ton Two-ton lots £ s. d.
Soft Sheets C.R. and C.A.—	
20 gauge	62 7 6
24 gauge	64 17 6
26 gauge	67 17 6
Galvanised Corrugated Sheets, 6-ft. to 9-ft. —	
20 gauge	70 18 0
24 gauge	74 8 0
26 gauge	79 13 0
Galvanised Flat Sheets C.R. and C.A. :	
20 gauge	72 8 0
24 gauge	75 18 0
26 gauge	81 3 0

ALUMINIUM AND ALUMINIUM ALLOYS

(Base Prices)		£ s. d.
Sheet BS 1740 S1C 18 SWG (36 in. wide)	per lb.	2 11½
Sheet BS 1470 NS3 Utility 18 SWG (36 in. wide)	,,	2 10½
Coiled strip BS 1470 S1C 18 SWG (24 in. wide)	,,	2 10½
Coiled strip BS 1470 NS3 Utility 18 SWG (24 in. wide)	,,	2 10
Coiled strip for flashing, high purity, 22 SWG (12 in wide)	,,	3 1
Corrugated sheet BS 1470 NS3 Circular Profile 8 ft. × 32 in. × 20 SWG	per sheet	1 13 0
Corrugated sheet BS 1470 NS3 Industrial Profile 8 ft. × 31¾ in. × 20 SWG	,,	1 18 8
Corrugated sheet BS 1470 NS3 Mansard Profile 8 ft. × 31¾ in. × 20 SWG	,,	1 12 1
Extruded section BS 1476 E1C simple moulding	per lb.	2 9½
Extruded section BS 1476 E1C 1 in. diam. round	,,	2 7
Extruded section BS 1476 HE10WP simple angle	,,	3 0½
Extruded section BS 1476 HE10WP 1 in. diam. round	,,	2 11½
Tubing BS 1471 T1C 1½ in. O/D × 20 SWG	,,	4 5½
Tubing BS 1471 HT10WP 1½ in. O/D × 20 SWG	,,	5 10

PLUMBERS' BRASS WORK, etc.

Delivered in London area.

All per dozen	M.O.H. ½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown bib cocks Crutch head for iron	87/–	128/–	—	—	—	—
Toilet bib cocks for iron	109/–	158/5	—	—	—	—
Screwdown stop cocks for iron	66/–	95/9	188/–	363/–	522/6	917/6
do. with two unions for lead	89/–	132/–	234/4	472/–	623/6	1,389/6
Double nut boiler screws	18/8	26/5	47/6	48/6	67/–	93/6
Heavy Croydon ball valves	77/–	193/6	312/5	568/8	734/10	—
Plumbers' union brass lead to iron	19/6	23/6	38/6	52/10	70/6	165/–
	1½ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
Caps and Screws	33/–	40/8	59/6	92/5	118/10	155/3
Brass Sleeves	—	31/11	31/11	56/2	74/10	91/5
	1½ × 6 lb.	1½ × 6 lb.	2 × 7 lb.	3 × 7 lb.		
Lead P. trap with brass cleaning screws	64/10	81/–	129/6	221/6		
Lead S. trap do. do.	78/6	97/3	159/6	286/3		

Solder :			s. d.
Plumbers'	1 cwt. lots	320/–	14 lb. lots per lb. 3 7
Tinmen's	,, ,,	404/–	,, ,, ,, 4 5
Blow pipe	,, ,,	407/–	,, ,, ,, 4 6

Copper Tubes and Sheets

Copper tubes BSS 659/1944 on the basic price of 30¾d. per lb. plus gauge and manufacturing extras as follows. Minimum quantities, 10 cwt.

	Extra d.		d.		d.
⅜ in. × 19 gauge	15½	Total per lb.	46¾	Approx. per ft.	12½
½ in. × 19 ,,	13¾	,, ,,	44¾	,, ,,	17½
1 in. × 18 ,,	12¼	,, ,,	43½	,, ,,	26¾
1¼ in. × 18 ,,	11¾	,, ,,	42½	,, ,,	32½
1½ in. × 18 ,,	11¾	,, ,,	42½	,, ,,	38¾
2 in. × 17 ,,	13¼	,, ,,	44¼	,, ,,	51¾

Small Quantity extras :—

10 cwts. to 5 cwts.	plus ½d. per lb
5 cwts. to 2 cwts.	,, 1d. ,,
2 cwts. to 1 cwt.	,, 2d. ,,

	£ s. d.
Rolled Copper sheets up to 48 in. wide, basic price plus gauge and manufacturing extras	300 0 0

Zinc

	£ s. d.
Sheet Zinc, 10 gauge (25 SWG), 5 cwt. lots upwards per cwt.	7 15 3
,, ,, 12 gauge (23 SWG), ,, ,, ,, ,,	7 14 9
,, ,, 14 gauge (21 SWG), ,, ,, ,, ,,	7 13 6

Brass Tubes

Brass tubes, basic price, plus gauge and manufacturing extras per lb.	2 1½

LEAD SHEET AND PIPES

Basis selling price to one address in London or Home Counties :

		£ s. d.
Lead Sheet, English, 3½ lb. substance and upwards	per ton	112 15 0
,, Water Pipe, in coils	,,	115 0 0
Lead Soil Pipe, 10 ft. or over 2 in. to 4 in. dia.	,,	116 10 0
,, ,, ,, over 4 in. dia.	,,	118 10 0
,, Gas or Untinned Compo pipe	,,	116 10 0

5 cwt. lots and over less 6d. per cwt. off basic prices.

Extras over Basis for quantities under 5 cwt.:		
3 cwt. and under 5 cwt.	per cwt.	4 0
1 cwt. do. 3 cwt.	,,	6 0

Smaller quantities than 1 cwt. priced specially.

Supplying sheet lead and lead pipe to less than basis weights and cutting to sizes less than basis charged extra according to current trade schedule.

Allowance for Old Lead, collected, £63 0s. 0d. per ton weighed at buyer's works.

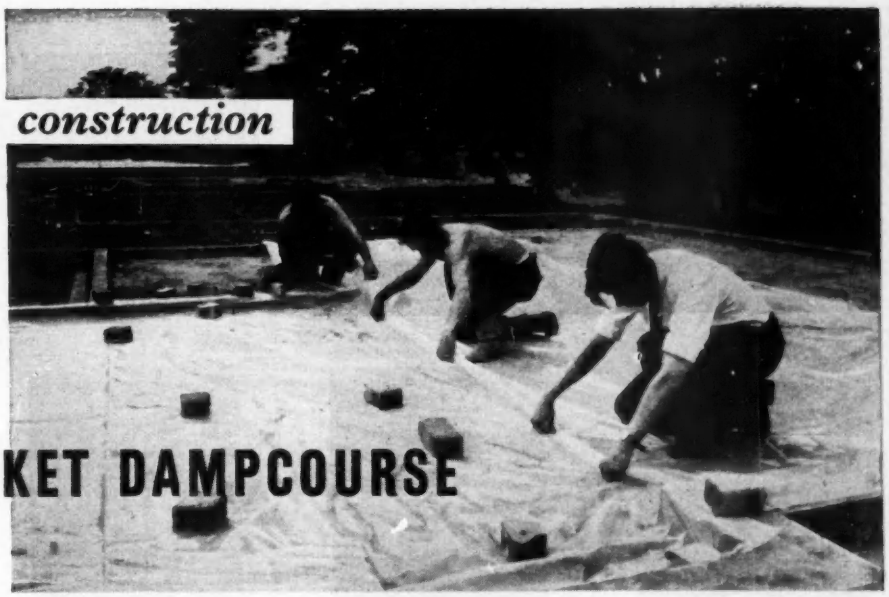
PLASTER, etc.

		£ s. d.
Coarse Pink in 1-ton loads and over delivered on site	per ton	8 4 6
do. White do. do. do.	,,	8 14 0
Sirapite Coarse BSS 1191 Class C do.	,,	8 15 9
do. Fine do. do. do.	,,	9 3 3
do. Browning BSS 1191 Class B do.	,,	8 15 9
do. Board Finish do. do.	,,	8 15 9
Blue Lias Lime, in 6-ton loads	,,	6 14 6
Hydrated Lime (Grey), in 6-ton loads	,,	5 10 0
do. (White) do.	,,	6 0 0
Lump Lime (Grey) do.	,,	5 7 0
do. (White) do.	,,	5 14 6
White Keen's or Parian Cement, in 1-ton loads	,,	11 19 3
Pink Keen's or Parian Cement, in 1-ton loads	,,	11 14 0
Granite Chips, in 6-ton loads	,,	2 5 3
Hair	per cwt.	4 17 6
Gypsum Plaster Lath or Base Board, ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	per yd.	2 3½
1,200 yds.	,,	2 2½
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,	2 9
1,200 yds.	,,	2 9
Gypsum Plaster Wall Boards, 3 and 4 ft. wide 6 to 12 ft., ⅜ in. thick, 600 yds, and over in one delivery. Delivered site	,,	2 6½
1,200 yds.	,,	2 5½
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,	3 0
1,200 yds.	,,	3 0

In house-raft construction

specify

BCL BLANKET DAMPCOURSE



BCL Blanket Dampcourse (0·005″ thick BCL polythene film) is the answer to the problems of moisture penetration into concrete house-rafts. It stops water rising through the raft into the house and, by preventing water-absorption by the concrete, removes the danger of the raft being damaged by frost or sulphate.

Geo. Wimpey & Co. Ltd. make extensive use of BCL Blanket Dampcourse. This picture, taken with their kind permission, shows the film laid in position before the concrete is placed.

BCL Blanket Dampcourse is

—**waterproof**—virtually eliminates moisture-absorption by the concrete ;

—**rotproof and chemically inert**—will not break down or lose efficiency ;

—**tough and flexible**—will not easily break or tear when being laid ;

—**very easy to handle**—the film is light in weight and is simply laid over the fill before the concrete is placed ;

—**cheap**—the film costs less than 11d. per sq. yd. delivered to site U.K.

For further information, send today for a copy of the free illustrated booklet, "BCL Blanket Dampcourse", which incorporates a report on the tests carried out with this material by the Industrial Research Laboratories of the City of Birmingham Public Works Department.

BRITISH CELLOPHANE LIMITED* PLASTIC FILMS DIVISION

HENRIETTA HOUSE, 9 HENRIETTA PLACE, LONDON, W.1. MUSEUM 8311

*a member of the Courtaulds group of companies

To: BRITISH CELLOPHANE LIMITED, Plastic Films Division,
Henrietta House, 9 Henrietta Place, London, W.1.

Please send me, free of charge and without obligation, your booklet "BCL Blanket Dampcourse"..... Please tick as appropriate

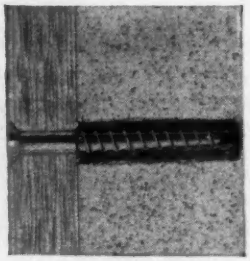
Please ask your representative to call .....

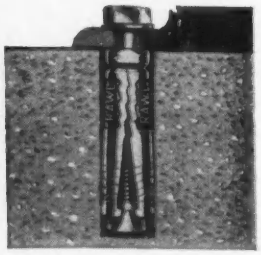
NAME .....

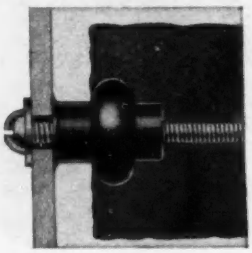
ADDRESS .....

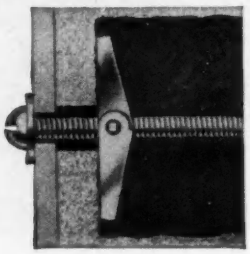
..... B9.

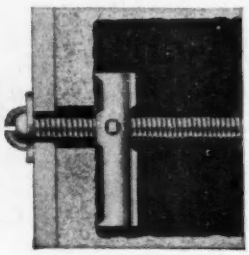
SOLID OR CAVITY MATERIALS

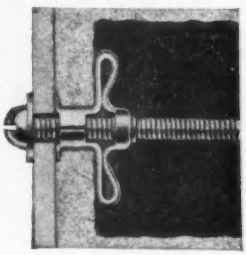






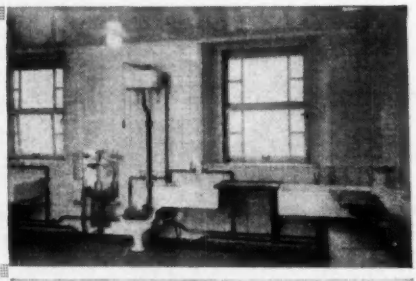




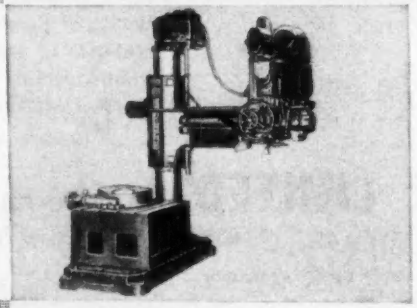


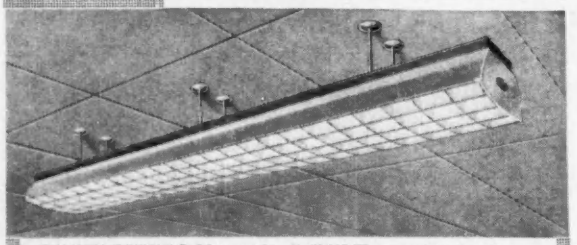
Rawlplug fixing devices save you time and money

SCREW FIXINGS
Use the famous RAWLPLUG for neat, firm fixings in brick, stone, etc. All sizes for up to ¾" diameter Coach Screws. Rawlplugs are waterproofed and unaffected by climatic conditions.



BOLT FIXINGS
For bolting down machines, light or heavy, use RAWLBOLTS, a dry fixing that grips by expansion. No cold chiselling, no waiting for cement to harden. Sizes up to 1" bolt diameter.





CAVITY FIXINGS *The amazing RAWLNUT, screwed up from the front, forms its own rivet head behind the material—airtight, watertight, vibration-proof, squeak-proof! For all thin or hollow materials.*

Fixing methods that served well enough in bygone days fall far short of modern standards of efficiency, when an average machine can be safely bolted down *and in operation* within an hour or so of arrival!

Rawlplug Fixing Devices always save time and therefore money, for it is a simple *fact* that on *every* screw and bolt fixing job, in solid *or* cavity materials, you'll make strong, absolutely safe fixings in *far less time than by any other method.*

You can easily prove this for yourself. The first step is to write for full details of the 21 different types of Rawlplug Fixing Devices. Write us now —and if after studying our literature, you have any difficulties about a particular problem, our Technical Service specialists will be delighted to advise you without obligation.

RAWLPLUG

FIXING DEVICES

THE RAWLPLUG COMPANY LTD
CROMWELL ROAD, LONDON, S.W.7

PAINTS AND DISTEMPER

Delivered London area.		£	s.	d.
Ceiling Distemper	per cwt.	1	7	6
Washable Distemper	,,	5	5	0
Gloss Paint	per gal.	2	12	0
Super Snowcem cement paint (in 1 cwt. drums) ...	per cwt.	4	0	0
LEAD PRODUCTS AND OILS				
Ground White Lead, in 1 cwt. kegs	per cwt.	9	7	6
Genuine White Lead Paint, 1-19 gal. lots in 1 gal. tins	per gal.	3	6	6
Genuine Red Lead, Dry, 1 cwt. keg (10 ton lots)	per cwt.	5	12	6
do. do. do. (½ cwt. lots)	,,	6	19	0
Genuine Linseed Oil Putty, 1 cwt. keg	,,	2	12	6
Size XD quality 28 lb.	per tin		9	0
Raw Linseed Oil (5 gal.) drums extra	per gal.		19	2
Boiled Linseed Oil (5 gal.) do.	,,		20	0
SUNDRIES				
Turpentine substitute (5 gal.) drums extra	,,		5	4¾
do. do. (40 gal.) do.	,,		4	8¾
Solignum, Brown (5 gal. cans) Exterior	,,		8	8
Creosote (40 gal. barrels)	,,		2	3
Paste Powder (1 lb. packets)	per lb.		2	4
White Lining Paper	per piece		1	2

VARNISHES, etc.

Delivered London area.		£	s.	d.
Oak Varnish, Outside or Inside	per gal.	2	0	0
Oal Pale Copal do. do.	,,	2	0	0
Hard Drying Oak for Inside	,,	2	5	0
Crystal Paper Varnish do.	,,	2	8	0
Eggshell Flat Varnish do.	,,	2	2	0
Finest Carriage Varnish	,,	2	7	0
Front Door Varnish	,,	2	4	0
Japan Gold Size	,,	1	12	0
Black Japan	,,	1	16	0
Brunswick Black	,,	1	12	0
Berlin Black	,,	1	10	0
Terebene	,,	1	12	0
Knotting (1 gal. bottles free)	,,	1	15	0
French and Brush Polish (do.)	,,	1	15	0

GLASS

Delivered London area.		s.	d.
18 oz. Sheet Glass Ordinary Glazing Quality— Cut Sizes	per ft. sup.		9½
24 oz. do. do. do. do.	,,		11½
26 oz. do. do. do. do.	,,	1	2½
32 oz. do. do. do. do.	,,	1	6½
¼ in. Rolled Plate	,,	1	2½
7/16 in. Rolled and Rough Cast	,,	1	5
½ in. do. do.	,,	1	5¾
⅛ in. Figured Rolled and Cathedral, Standard patterns—		s.	d.
White Group 1	per ft. sup.	1	2½
do. Group 2	,,	1	6½
do. Standard Tints	,,	2	1½
do. Special Tints	,,	7	3
⅛ in. Pinstripe, Hammerstripe, Reeded, Reedlyte and Luminating Group 3	,,	1	7½
¼ in. Wired Cast	,,	1	9½
¼ in. Georgian Wired Cast	,,	1	9½
Hollow Glass Blocks—			
P.B.2 5¾ × 5¾ × 3⅞ in.	each	3	3
P.B.3 7¾ × 7¾ × 3⅞ in.	,,	5	0
P.B.32 7¾ × 7¾ × 3⅞ in.	,,	5	0
Radiused Corner Blocks to match up with—			
P.B.2	,,	6	0
P.B.3	,,	7	6
P.B.32	,,	7	6
¼ in. Polished Plate Glass, G.G. quality—			
In plates not exceeding 2 ft. sup.	per ft. sup.	4	7
,, ,, ,, 5 ft. sup.	,,	5	7
,, ,, ,, 45 ft. sup.	,,	6	9
,, ,, ,, 100 ft. sup.	,,	7	4
¼ in. Polished Plate, extra sizes, *i.e.*, plates exceeding 100 ft. sup. or 160 in. one way or 96 in. both ways. G.G. quality—Not exceeding 135 ft. sup. or 240 in. one way or 130 in. both ways ...	,,	10	9
Not exceeding 180 ft. sup. or do.	,,	14	3

Plates exceeding 180 ft. sup. prices on application.
Substances other than ¼ in. Polished Plate at Special Prices.
Quantity Tariff—Sheet and Sundry Glass.
The following prices apply to minimum quantities of one size and one pattern delivered by the manufacturer to one site at one time.

Description of Glass	Minimum quantity	per ft. sup. s.	d.
18 oz. sheet O.Q.	3,000		6¾
24 oz. ,, ,, ...	2,000		8¾
26 oz. ,, ,, ...	2,000		11
32 oz. ,, ,, ...	2,000	1	2½
¼ in. Rolled Plate	1,000		10¾
⅛ in. Figured Rolled and Cathedral Standard Patterns, White Group 1	1,000		10¾
do. Group 2	1,000	1	2
⅛ in. Pinstripe, Hammerstripe, Reeded, Luminating and Spotlyte Group 3	1,000	1	2
7/16 in. Rolled Plate or Rough Cast	2,000	1	1
½ in. do. do.	2,000	1	1¾
¼ in. Wired Cast, Hexagonal	2,000	1	4½
¼ in. Georgian Wired Cast	2,000	1	4½

THE BUILDER RATES OF WAGES

AS FROM OCTOBER 5, 1959. **(Every endeavour is made to ensure accuracy but we cannot be responsible for errors.)**

KEY TO SCHEDULE OF GRADE RATES.

Grade Classification	A	A1
Craftsmen	4/9	4/8½
Labourers	4/2½	4/2

Town	*Grade*
Aberavon	A
Aberdare	A
Abergavenny	A
Abingdon	A1
Accrington	A
Addlestone	A
Afan Valley	A
Aldeburgh	A1
Aldershot District	A1
Alfreton UD	A
Alnwick UD	A
Altrincham	A
Amble	A
Ambleside	A
Amersham	A
Ammanford	A
Andover	A1
Anglesey, Isle of	A
Ardingly	A1
Arundel	A1
Ascot	A1
Ashbourne RD	A1
Ashbourne UD	A1
Ashby-de-la-Zouch UD	A
Ashby Woulds UD	A
Ashford (Kent)	A1
Ashford (Middlesex)	A
Ashington UD	A
Ashtead	A
Ashton-under-Lyne	A
Aspatria and Brayton	A
Atherstone RD	A
Attleborough	A1
Axminster	A1
Aylesbury	A1
Aylsham	A1
Bagshot	A1
Bakewell UD	A1
Banbury	A1
Bangor	A
Barnard Castle UD	A
Barnoldswick UD	A
Barnsley CB	A
Barnstaple	A1
Barrow-in-Furness	A
Barrow-upon-Soar RD (part Thrussington)	A1
Barry	A
Basford RD (ex. Willough-by-on-the-Wolds A1)	A
Basingstoke	A1
Bath	A
Batley MB	A
Baxterley	A1
Beaconsfield District	A
Bearl	A
Beccles	A1
Bedale RD	A
Bedford	A
Bedlington	A
Bedlingtonshire UD	A
Bedwas	A
Beeston & Stapleford UD	A
Belper UD	A
Belton	A
Berkhamsted	A
Berrington	A
Berwick Borough	A
Beverley MB	A
Bewdley MB	A
Bexhill-on-Sea	A1
Bideford	A1
Biggleswade	A1
Billericay	A
Billing	A
Billingham UD	A
Bilsthorpe	A
Bilston MB	A
Birchington	A1
Birkenhead	*
Birmingham CB	†A
Bishop Auckland UD	A
Bishop's Stortford	A
Bishops Castle MB	A1
Bispham	A
Blackburn	A
Blackpool	A
Blackwell RD	A
Blandford	A1
Blaydon UD	A
Blidworth	A
Blyth B.	A
Bodmin	A1
Bognor Regis	A1
Boldon UD	A
Bolsover UD	A
Bolton	A
Boston MB	A
Bourne End	A
Bournemouth District	A
Brackley MB	A1
Bracknell	A1
Bradford CB	A
Bradford-on-Avon	A1
Braintree	A1
Brandon & Byshottles UD	A
Brecon, Borough of	A1
Breconshire, County of	‡A1
Brent Knoll	A1
Brentwood	A
Bridgend	A
Bridlington MB	A
Bridlington RD	A
Bridgnorth MB	A
Bridgnorth RD	A1
Bridgwater	A1
Brierfield	A
Brighouse MB	A
Brighton & Hove	A
Bristol District	A
Broadstairs	A1
Bromsgrove UD	A
Broughton, Flint	A
Buckfastleigh	A1
Buckingham	A1
Buckley	A
Bungay	A1
Burnham-on-Crouch	A1
Burnham-on-Sea	A1
Burnley	A
Burton-on-Trent CB	A
Bury	A
Bury St. Edmunds	A1
Buxton	A
Byfleet	A1
Caernarvon	A
Caernarvonshire, Cnty. of ‡	A
Calder Valley	A
Camberley District	A1
Cambridge	A
Cannock UD	A
Canterbury	A1
Cardiff	A
Cardiganshire, Cnty. of	‡A1
Carlisle	A

CURRENT RATES OF WAGES—Continued

Town	Grade
Carlton UD	A
Carmarthen—Borough of	A
Carmarthenshire, Cnty. of	A
Carnforth	A
Castleford UD	A
Caterham	A
Chapel-en-le-Frith	A
Chard	A1
Charmy Down	A
Chatham District	A
Chatteris	A1
Cheadle (Staffs) RD	A
Chelmsford	A
Cheltenham	A
Chepstow	A
Chertsey	A
Chester	A
Chester-le-Street UD	A
Chesterfield MB	A
Chesterfield RD	A
Chichester	A1
Chipping Norton	A1
Chipping Sodbury	A1
Chippenham (inc. Chippenham Within and Hardenhuish)	A1
Chorley	A
Cirencester	A1
Clacton	A1
Clay Cross UD	A
Cleethorpes MB	A
Clevedon	A1
Cleveleys	A
Clitheroe	A
Coalville UD	A
Cobham (Surrey)	A
Colchester	A
Colne	A
Colwyn Bay	A
Congleton	A
Consett UD	A
Conway	A
Corby UD	A
Cornwall, County of	‡A1
Corsham District	A
Coventry CB	A
Cranbrook	A1
Cranleigh	A1
Cranwell Aerodrome Site	A
Crawley	A
Crewe	A
Crewkerne	A1
Cromer	A1
Crook and Willington UD	A
Crowborough	A1
Cuckfield	A1
Cwmbran	A
Dalton-in-Furness	A
Darlington CB	A
Dartmouth	A1
Darwen	A
Daventry MB	A
Deal	A1
Denbigh Town	A
Derby CB	A
Devizes	A1
Devon, County of	‡A1
Dewsbury CB	A
Didcot	A1
Diss	A1
Doncaster CB	A
Dorchester	A1
Dorking	A
Dorset, County of	A1
Dover	A1
Dovercourt	A
Driffield UD	A1
Drigg & Carleton	A
Droitwich MB	A
Dudley CB	A
Dunstable	A
Durham B	A
Eastbourne	A
E. Glam. & Mon. Val.	A
East Grinstead District	A1
East Kesteven RD	A1
East Retford MB	A
Eastwood (Notts) UD	A
Ebbw Vale & District	A
Edenbridge	A1
Ely	A1
Epping	A
Evesham MB	A1
Exeter	A
Exmouth	A1
Fakenham	A1
Falmouth	A1
Fareham	A
Faversham	A1
Felixstowe	A1
Filey UD	A
Fleetwood	A
Flint MB	A
Folkestone	A1
Frinton	A1
Frome	A1
Gainsborough UD	A
Gateshead CB	A
Gillingham (Dorset)	A1
Gillingham (Kent)	A
Glastonbury & Street	A1
Glossop	A
Gloucester	A
Gloucestershire, Cnty. of	‡A1
Godalming	A1
Goole, MB	A
Goole RD	A
Gosport	A
Grantham MB	A
Gravesend	A
Great Yarmouth	A
Grimsby CB	A
Grimsby RD (part)	A1
Guildford District	A1
Halesowen MB	A
Halifax CB	A
Halstead	A1
Haresfield	A1
Harlow	A
Harpenden	A
Harrogate MB	A
Hartlepool B	A
Harwell	A1
Harwich	A
Haslemere	A1
Hastings	A1
Hatfield (Herts)	A
Havant	A
Haywards Heath	A1
Heanor UD	A
Hemel Hempstead	A
Henley-on-Thames	A1
Hereford	A
Herefordshire, Cnty. of	‡A1
Herne Bay	A1
Hertford	A
Hexham RD	A
Hexham UD	A
Heysham	A
Heywood	A
Higham Ferrers MB	A
High Wycombe	A
Hinckley UD	A
Hitchin	A
Hoddesdon	A
Holywell	A
Horley	A1
Horncastle UD	A1
Horsham	A1
Horwich	A
Huddersfield CB	A
Hull	A
Hunstanton	A1
Huntington (Staffs)	A
Ilfracombe	A1
Ilkeston MB	A
Ilkley UD	A
Ipswich	A
Isle of Sheppey	A1
Isle of Thanet	A1
Isle of Wight	A1
Jarrow B.	A
Keighley MB	A
Kendal	A
Kenilworth UD	A
Kettering MB	A
Keynsham	A
Kidderminster MB	A
Kingskerswell	A1
King's Lynn	A1
Kingsteignton	A1
Kirkham	A
Knaresborough UD	A
Knutsford	A
Lancaster	A
Leamington MB	A
Leatherhead	A
Leeds CB	A
Leek UD	A
Leicester CB	A
Leighton Buzzard	A1
Leiston	A1
Leominster	A1
Letchworth	A
Lewes	A1
Lichfield MB	A
Lincoln CB	A
Liskeard	A1
Littlehampton	A1
Liverpool	*
Llandudno	A
Llanelly (inc. Llanelly RD)	A
Llanfairechan	A
Llangollen	A
London	*
Long Eaton	A
Looe	A1
Loughborough MB	A
Louth MB	A1
Lowestoft	A
Loxton	A1
Ludlow MB	A1
Ludlow RD	A1
Luton	A
Lyme Regis	A1
Lyneham (Devon)	A1
Lytham	A
Macclesfield	A
Maidenhead	A
Maidstone	A
Maldon (Essex)	A1
Maltby UD	A
Malton UD	A
Malvern UD	A
Manchester	A
Manningtree	A1
Mansfield MB	A
March	A1
Margate	A1
Market Harborough RD	A1
Market Harborough UD	A
Market Rasen UD	A1
Martock	A1
Maryport	A
Matlock UD	A
Melksham	A1
Melton Mowbray UD	A
Merionethshire	A
Merthyr	A
Mexborough UD	A
Middlesbrough CB	A
Middleton	A
Middlewich	A
Mildenhall	A1
Milford Haven UD	A1
Minehead	A1
Monmouth—Borough of	A
Monmouthshire	A
Morecambe	A
Moreton Valence	A1
Morley	A
Morpeth B	A
Morpeth RD	A
Mundesley	A1
Nantwich	A
Neath & Valley	A
Nelson	A
Newark MB	A
Newbury	A1
Newcastle-upon-Tyne CB	A
Newcastle-under-Lyme	A
New Forest District	A1
Newmarket	A1
Newport, Mon.	A
Newport Pagnell	A1
Newquay	A1
Newton Abbott	A1
Normanton UD	A
Northallerton District	A
Northallerton UD	A
Northampton CB	A
North Shields	A
North Walsham	A1
Northwich	A
Norton Radstock	A1
Norwich	A
Nottingham CB	A
Nuneaton MB	A
Oakham RD	A1
Oakham UD	A1
Okehampton	A1
Oldham	A
Ongar	A
Ormskirk	A
Ossett & Horbury	A
Oswestry	A
Oundle UD	A1
Oxford	A
Oxted	A1
Padstow	A1
Paignton	A1
Par	A1
Pembrokeshire	A
Penmaenmawr	A
Penrith UD	A
Penzance	A1
Peterborough, Soke of (Eastern Regional portion)	A1
Petersfield	A1
Pickering	A
Plymouth	A
Pontefract MB	A
Pontypool & District	A
Pontypridd District	A
Porthcawl	A
Portishead	A
Portland Bill	A1
Portsmouth	A
Port Talbot	A
Preston	A
Princetown	A1
Pudsey MB	A
Pulborough	A1
Radnorshire, County of	‡A1
Ramsgate	A1
Raunds UD	A
Rayleigh	A
Reading	A
Redcar B	A
Redditch UD	A
Redhill & Reigate	A
Rhondda Valley	A
Richmond B (Yorks.)	A
Ripon MB	A
Rochdale	A
Rochester	A
Ross-on-Wye	A1
Rossendale Valley	A
Rotherham CB	A
Royston	A1
Rugby MB	A
Rugeley UD	A1
Rushden UD	A
Saffron Walden	A1
St. Albans	A
St. Austell	A1
St. Helens	A
St. Neots	A1
Salisbury City	A1
Salisbury Plain	A1
Sandy	A1
Sawbridgeworth	A
Saxmundham	A1
Scarborough MB	A
Scunthorpe MB	A
Seaford & Newhaven	A1
Selby UD	A
Sevenoaks	A
Shaftesbury	A1
Sheerness	A1
Sheffield MB	A
Shepton Mallet	A1
Sherborne	A1
Shipley	A
Shoeburyness	A
Shoreham	A
Shrewsbury MB	A
Sirhowy Valleys	A
Sittingbourne	A1
Skegness UD	A1
Skipton UD	A
Sleaford UD	A
Slough, Windsor & Eton District	A
Smethwick CB	†A
Smettisham	A1
Solihull B.	A
Somerset, County of	‡A1
Southampton & Eastleigh	A
Southend-on-Sea District	A
Southport	A
South Shields CB	A
Southwold	A1
Spalding UD	A1
Stafford MB	A
Staines	A
Stamford MB	A
Stantonwick	A
Stevenage	A
Stockport	A
Stockton RD	A
Stockton-on-Tees B	A
Stoke-on-Trent CB	A
Stoke Orchard	A1
Stourbridge MB	A
Stourport UD	A
Stowmarket	A1
Stratford-on-Avon MB	A
Stroud (RD Area)	A1
Sunderland CB	A
Sunningdale	A1
Sutton Coldfield MB	A
Swadlincote UD	A
Swaffham	A1
Swanage District	A1
Swansea	A
Swindon District	A
Swinton UD	A
Tamworth MB	A
Taunton	A1
Tavistock	A1
Tenterden	A1
Teignmouth	A1
Tewkesbury	A1
Thames Haven	A
Thetford	A1
Thirsk RD	A
Thorpe Bay	A
Thurrock UDC (including Tilbury, Grays and the area north to Billericay)	A
Todmorden MB	A
Tonbridge	A1
Torquay	A1
Totnes	A1
Tring	A1
Trowbridge	A1
Truro	A1
Tunbridge Wells	A1
Tynemouth CB	A
Ulverston	A
Uppington (Salop)	A1
Uttoxeter RD	A1
Uttoxeter UD	A1
Wakefield CB	A
Wakefield RD	A
Walsall CB	A
Wallsend B	A
Walsden	A
Walton-on-Naze	A1
Ware	A
Warminster	A1
Warrington	A
Warwick MB	A
Wednesbury MB	A
Wellingborough UD	A
Wellington UD	A
Wellington (Somerset)	A1
Wells (Norfolk)	A1
Wells (Somerset)	A1
Welwyn	A
Welwyn Garden City	A
West Bromwich CB	A
Westbury	A1
Westcliff-on-Sea	A
Westerham	A1
West Hartlepool CB	A
Westmorland	A
Weston-super-Mare	A1
Weybridge	A
Weymouth (incl. Portland Bill, excl. Portland Stoneyards)	A1
Whitby UD	A1
Whitby RD	A1
Whitehaven	A
Whitley & Monkseaton UD	A
Whitstable & District	A1
Wickford	A
Widnes	A
Wigan	A
Wigton	A
Wilmslow	A
Wiltshire, County of	‡A1
Wimborne	A1
Wincanton	A1
Winchester	A1
Windermere	A
Wisbech	A1
Witham	A1
Withernsea UD	A
Woking	A1
Wokingham	A1
Wolverhampton CB	A
Wolverton District	A1
Woodbridge	A1
Woodhall Spa UD	A1
Woodstock	A1
Worcester CB	A
Workington	A
Worksop MB	A
Worthing	A1
Wrexham (incl. Cefn)	A
Wroughton	A1
Wylam	A
Wymondham	A1
Yate	A1
Yeovil Borough	A1
York CB	A
Ystalyfera	A

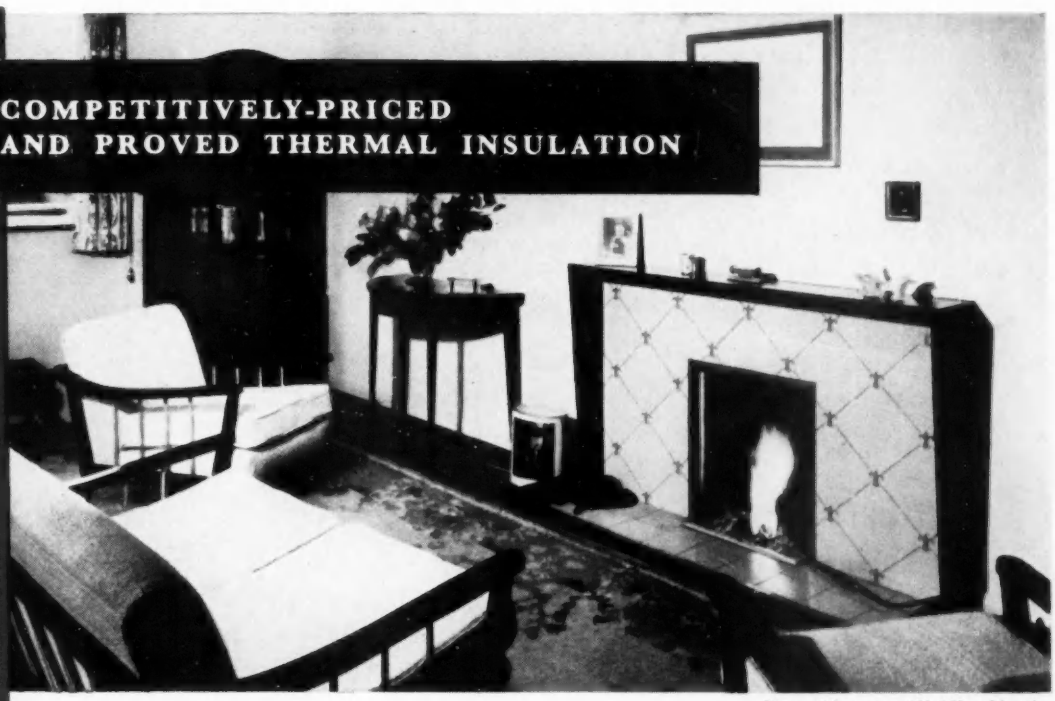
* For Birkenhead, Liverpool and London the rates are :—Craftsmen, 4s. 10½d. ; Labourers, 4s. 4d. In the case of London the rate beyond the 12-mile radius is : Craftsmen, 4s. 10d. ; Labourers, 4s. 3½d. † Plus 4d. per working day. ‡ This is the County rate and applies except where higher grades are stated.

NOTE.—Carpenters and Joiners providing own tools when employed in establishments operating under the Supplementary Rules for Woodworking Factories and Shops receive 2d. per day ; when employed on other building industry work, 4d. per day.

WOMEN'S RATES.—In all districts throughout the country the rate of wages for women engaged in craft processes is 3s. 10½d. per hour. Women engaged on work other than craft processes, 3s. 6½d. per hour.

For Building Trade Wages in Scotland, see page 435

COMPETITIVELY-PRICED AND PROVED THERMAL INSULATION



Photograph by courtesy of Ideal Home Magazine.

At "New Britwell", a house at Maidenhead. *Architect:* Michael H. H. Bayley, A.R.I.B.A.

CUT THIS OUT AND KEEP FOR REFERENCE

PRACTICAL CONSTRUCTION

ROOF
Tiles on felt
2-3 inches slag wool.

CEILINGS
Plasterboard and skim coat.

EXTERNAL WALLS
Ground floor: 4½-in. brickwork, 2-in. cavity, 4-in. Thermalite, two-coat plaster.
First floor: Tyrolean rendering, 3-in. Thermalite, 2-in. cavity, 4-in. Thermalite, two-coat plaster.

PRACTICAL CONSIDERATION

The owner writes regarding the efficiency of the Thermal insulation.

'The only further comment that I can add after nearly three years' occupation is that the heating system was unnecessarily large, the bedroom radiators only being used occasionally and it is only during very cold spells that it has to be stoked more than every other day."

PRACTICAL CONFIRMATION

The thermal conductivity (k) of cellular concrete of 50 lbs. cu. ft. density according to the I.H.V.E. guide 1955 conditioned at 64° F/65%R.H. = 1.4 B.T.U.'s etc. This corresponds to the normal conditions in the average heated home during the winter months where a Thermalite inner leaf will have an equilibrium moisture content of approximately 4%

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Hams Hall, Lea Marston, Sutton Coldfield, Warwickshire. Telephone: Coleshill 2081.

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Loadbearing Insulating Building Blocks

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The Marley Tile Co. Ltd.
Suppliers of Floor Tiles

Marley Vinyl Tiles made flooring history at the Brussels Exhibition. Exposed to the tread of over six million people they retained all of their permanent glowing beauty, and were reinstalled elsewhere when the exhibition was over. Such performance is adequate testimony to the superior qualities of Vinyl when combined with Marley knowledge of its application to flooring.

Marley de Luxe Vinyl tiles are 12″ × 12″
in two thicknesses: 80/1000″ and 1/10″

A Marley de Luxe installation at "Donanne", Couturier, Tunbridge Wells

MARLEY · SEVENOAKS · KENT · *Sevenoaks 55255* · London Showrooms: 251 Tottenham Court Road, W.1

TECHNICAL REVIEW

This Review of plant, equipment and materials—in most cases new or with new features—is intended to give brief details only of the products mentioned. Notices are based on data supplied by the manufacturers. Additional information and prices can be obtained either direct or by using the prepaid Readers' Service form which appears on page 135 of this issue. The form can be used for more than one inquiry.

1. Acoustics

An ACOUSTIC STRIP FORM CEILING has been designed to allow wide flexibility in applying acoustic treatment to walls and ceilings and at the same time incorporating heating when required. The ceiling itself is made up of long 24 gauge galvanised metal trays, 12 in. wide, with ribs rolled into the section, the sides being finished with a half bevel so that butting trays forming the complete ceiling give the appearance from below of a continuous strip pattern 4 in. wide. The trays can be made in any transportable length and are demountable. Flushed light fittings and all other types of light fittings can be incorporated in the ceiling and the trays, which are perforated with ¼ in. holes at 5/16 in. centres, can be pierced or trimmed to take lighting cables, sprinklers and drop rods.

The heating of the ceiling can be done by hot water coils or electricity. To provide the electrical heating, prefabricated Merplex heating mats, adapted from the Simplex prefabricated under-floor heating mat system, are made up in 12 in. wide strips to suit the length of the trays. Above this is laid a continuous 1 in. thick mineral wool acoustic insulation pad, also running the full length of the tray. A simple connector between each cable enables multiples of strip form trays to be linked electrically into basic heating units. The cable is then down rated from its original output to give a temperature of 104° F. at 1½ in. centres.

Stilsound Acoustics Ltd.,
42 Whitworth-street, Manchester, 1.

2. Doors

Recently an increasing interest has been shown in the use of aluminium and in this column we have reviewed new ranges of cladding panels and window frames made from this metal. The latest development is an ALUMINIUM DOOR which is likely to appeal most to shops, offices, showrooms and hotels. As the metal has been more widely exploited both in America and on the Continent it is not surprising that the design is based upon American and Continental prototypes, but the claim is made that considerable improvements have been effected. The doors are polished and heavily anodised and the flush joints are invisibly welded. Standard single doors are 7 ft. x 3 ft. with overhead closers or single action floor springs.

Ajax Aluminium Limited,
Ajax House, Kangley Bridge-rd, SE26.

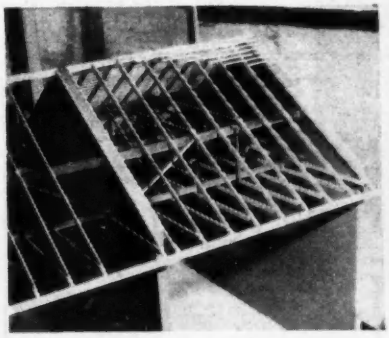
3. Heating

One of the latest devices for warming a room is an ELECTRICALLY HEATED CARPET. The heating elements, in the form of insulated flexible wires, are woven along the warp at two-inch intervals during manufacture so that they are hidden beneath the pile. The heat is evenly diffused over a wide area so that uniform warmth is given, whilst the carpet is never too hot to touch. Operating at a safe 25 volts, the carpet is supplied complete with a transformer and needs only to be connected to a power point. Because of the standards of safety embodied, the carpet is being recommended for use in offices.

T. Bond Worth & Sons, Ltd.,
Stourport-on-Severn, Worcester.

4. Roofing

THE increasing popularity of 'cross-wall' construction in the building of houses and flats has caused the roof designer to do a certain amount of re-thinking. The structural supports for floors and roofs are now provided by the end walls, whilst the front and rear walls, relieved of any load, are usually infilled. As pitched roofs for tiling or sheet covering materials are generally designed to span from front to rear walls, CROSS WALL ROOFING requires different solutions to those afforded by the traditional purlin and rafter roofs.



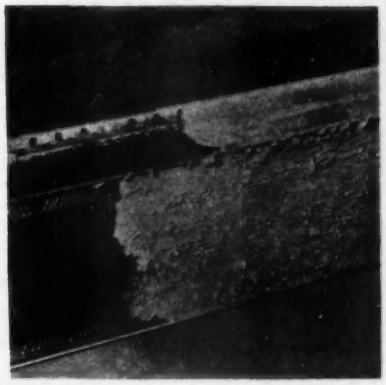
One of the five designs for cross wall roofing using strutted purlins and common rafters. The design is suitable for a tiled roof up to a 24 ft. spacing of walls

To meet this problem, in some degree, a useful folder has been produced containing five alternative solutions. Within the limitations of the free spans and maximum depth which are indicated on the drawings, they are all suitable for roofing semi-detached or terraced housing, or for blocks of flats. The range of designs shown is not claimed to be exhaustive and other variations and combinations of components are possible.

Timber Development Assoc., Ltd.,
21 College Hill, EC4.

5. Structural Steelwork

A few weeks ago we reported on the use of vermiculite cladding as a fire protection for structural steelwork. To provide a key for the plaster a number of METAL LATHING SYSTEMS have been devised, all of which give a 2-hour fire protection when using a 1-in. thickness of vermiculite plaster. One method that has been successfully employed has as the basis of the system two galvanised pressed metal sections, called thickness guides. The guides are used in pairs on each beam and each pair performs the dual function of securing the metal lathing and subsequently acting as a



Close-up of the cladding of an RSJ partly completed

guide to the finished thickness of plaster.

Two top thickness guides are fixed, one on either side of the joist, by plugging or bedding them to the concrete slab soffit. The bottom flange clips have been designed so that they can be attached very simply to the 'toes' of the bottom flange of the joist. When both top and bottom guides have been fixed, metal lathing is wired to them through perforations provided. The side lathing is fixed first and then the soffit lathing. The leading edge of the guides, having been fashioned so that they act as plasterers' grounds, are a ready means of ensuring that the 1-in. thickness of fire protective plaster can be applied before plastering commences, and verifying that the work has been finished to the specified thickness on completion.

Beatfyre Installations, Ltd.,
Barnet By-Pass, Boreham Wood, Herts.

Technical Publications

A catalogue dealing with their 'Nuastyle' range of plumbing and sanitary fixtures and fittings has been produced by EDWARD JOHNS & CO., LTD., of Armitage, Staffordshire. We learn also of a new development, which could not be included in the catalogue, which allows all wash basin and bath mixer fittings in this range to be fitted with a simple 'twin supply' device. This eliminates the possibility of back-flow into the mains, until now the principal objection of many water boards and authorities to mixer fittings, by allowing mixing to take place only at the point of discharge from the spout.

News in Brief

NFBTE Prize Presentation

PRIZES AWARDED by the National Federation of Building Trades Employers to craft apprentices and articled students in the London area were presented to the successful boys by the President of the NFBTE, Mr. D. E. Woodbine Parish, FIOB, at a brief ceremony preceding the meeting of the LMBA Council on February 18.

The Late W. D. Gibbs

It is with deep regret that we record the death of Mr. W. D. Gibbs, managing director of The Standard Wallpaper Co. Ltd., Windmill-road, Chiswick, W4. He was 68.

Builder's Edinburgh-London Walk

Latest in the long distance walking stakes is a Coventry builder, Victor Burr, aged 45, of 17 Byfield-road, who claims to have walked from Edinburgh to London in six days fifteen hours. He hopes to win a £250 prize offered by a Midland garage proprietor. Mr. Burr's next aim is to enter for the £5,000 John O'Groats to Land's End walk organised by Mr. Billy Butlin.

Prize-Winning Essay

A prize of 50 guineas has been awarded to Miss Catherine L. Reeve, a housing manager and secretary of the Rowe Housing Trust and Aubrey Trust Ltd., London, W11, for a prize-winning essay in a competition organised by the Royal Society of Health on 'The design and equipment of living accommodation for the use of able-bodied elderly couples and single persons, including the conversion of existing large houses for their needs.'

Surveyors' Mock Arbitration

A mock arbitration, which will include items of current legislation based on fact, has been arranged by the Building Surveyors' Institute (London and Home Counties area) for Wednesday, March 9, at 6.30 p.m. The venue is The Caxton Court Room, Caxton Hall, SW1. The arbitrator is Mr. J. L. Curtis. Admission, which is free, is by ticket, obtainable from 186/7 Temple Chambers, Temple-avenue, EC4. A cordial invitation is extended to members of other professional institutes.

Safety Training Courses

Following on the success of the special two-day safety training courses, set up last year by the Federation of Civil Engineering Contractors in collaboration with the Ministry of Labour and local safety groups, a new course, for the Merseyside area, has been added to those already being held. Two courses have so far been arranged in each of the three centres now covered. These begin at Birmingham on April 5 and October 4; at Enfield on April 7, May 3 and October 25; and at Aintree on April 27 and May 25 (provisional). Negotiations are in hand to establish similar courses in Scotland and South Wales.

Birmingham Overspill

The draft agreement between Atherstone RDC and Birmingham on accommodation for overspill population has been completed and is to be submitted to the Ministry for approval. Under the agreement, Atherstone is to build houses for tenants from Birmingham and the city council is to pay an agreed sum.

Work Study Film

The Eastern Federation of Building Trades Employers have produced a memo-motion film for a senior executives' work study week-end. It is a 16mm film concerned with bricklaying and roof-tiling operations and has proved so valuable for work study purposes that copies have been made available to the British Productivity Council Work Study Unit and the Building Advisory Service. The Eastern Federation will be pleased to supply at cost a copy of this film to any firm, technical college or other body. Those interested are asked to notify the Director, Mr. R. W. Porter, MBE, at 95 Tenison-road, Cambridge. A remittance of 3 guineas should accompany orders.

Above is a perspective of the proposed 23-storey head office building for the Hang Seng Bank, Hong Kong. The building, which will cost $11m., is scheduled for completion in 1962. The architect is Mr. T. C. Yuen. For full details see 'The Builder' for January 29

OVERSEAS BUILDING

From Our Own Correspondents

AUSTRALIA (QUEENSLAND). — Over £A1,116,000 is to be spent on hospital development in Brisbane and Southport this year. Included in the programme is the erection of the first stage of an 8-storey £A¾m. X-ray therapy, diagnostic and pathology block at the Brisbane General Hospital, and the completion of the new Southport Hospital. £A90,000 will be spent on a pediatric unit for the study of children's diseases to be built at the Brisbane Children's Hospital.

CANADA.—A $100m., 1,000-acre satellite city is to be constructed on the outskirts of Hamilton, Ontario. The planning consultant is Mr. L. Allan Wayne of Flamboro Park Developments, Ltd.... British American Oil have received conditional approval to construct a new $17m. processing plant at Rimley, Alta. . . . The City of Winnipeg, Manitoba, is to construct two reservoirs at a cost of $7 m. The proposed new Winnipeg City Hall will cost $6m. to construct. . . . Mannix and Associates have been awarded a $14.7m. contract on the Squaw Rapids Saskatchewan hydro power project.

CEYLON.—Tenders are being invited for the construction of a multi-storey office building in Queen-street, Fort, Colombo 1, for the Central Bank of Ceylon. The building will consist of a basement, vaults, ground floor, mezzanine floor, and three multi-storey tower blocks of nine storeys, each over mezzanine floor level. The structure will be reinforced concrete with a system of post tensioned prestressed beams in all tower blocks. Full details are advertised in this issue.

EL SALVADOR.—The Under-Secretary of Public Works of El Salvador has stated that there were good prospects of securing a loan of 10 million colones from the Export-Import Bank to finance works at the Ilopango airport. A technician from the International Civil Aviation Organisa-

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BRITISH MUSEUM (NATURAL HISTORY) NEW BUILDING, SOUTH KENSINGTON

Designed in the Chief Architect's Division M.O.W.
Senior Architect: W. Kendall, A.R.I.B.A.
Contractors: A. Roberts & Co. Ltd.

FREDERICK Braby & COMPANY LIMITED

LONDON: *352-364 Euston Road, London, N.W.1*
Telephone: EUSton 3456

GLASGOW: *Eclipse Works, Petershill Road, Glasgow, N.*
Telephone: SPRingburn 5151

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MEMBRANE CURING

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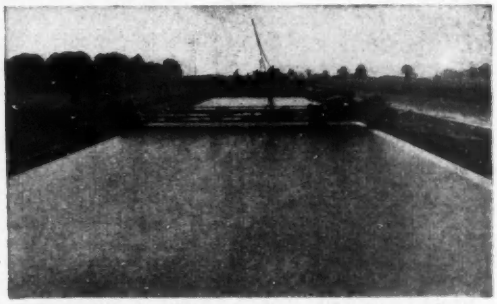
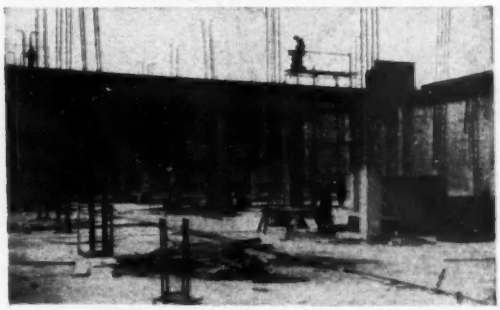


Curing the St. Albans By-Pass with "Ritecure"

Reservoir in the Khyber Pass cured with "Ritecure"



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tion has prepared a study of the project which includes the improvement of the airport services and the construction of a landing strip suitable for jet-propelled aircraft.

NEW ZEALAND.—The construction of the Haast Pass highway, linking the west coast of New Zealand's South Island with Otago, is to be speeded up and should be completed by 1964.

NIGERIA.—From Lagos Barclays Bank DCO gives news that work has started on clearing a 50-acre site for Nigeria's first asbestos cement factory. The factory, which is being constructed for Asbestos Cement Products Nigeria Ltd., at Ikeja, will produce asbestos cement products including corrugated and flat sheeting, ridging, ducting and piping.

TRANSVAAL.—The Roberts Construction Co. (Central Africa) Ltd. have been awarded the contract for the construction of a new copper refinery for the Messina (Transvaal) Development Co. Ltd. The contract includes the erection of ancillary housing.

WESTERN AUSTRALIA.—The Main Roads Department is developing a new 120-mile road route running southeast from the Ashburton Valley, to the present Meekatharra North Road, in Western Australia. The Works Minister is Mr. Wild.

Overseas Construction

A Tribute to British Engineering

THE VALUE OF overseas contracts for which British engineers were responsible reached a total of £630m. in January, 1959, an increase of £80m. over the previous year. MR. F. J. ERROLL, MP, Minister of State, Board of Trade, referred to this achievement in his address at the annual dinner of the Association of Consulting Engineers held at the Dorchester Hotel, W1, on February 15.

Paying tribute to the important part played by British consulting engineers in the development of backward countries, Mr. Erroll said that among the projects for which they had been responsible were the Hong Kong water scheme, estimated at £20m.; the East Pakistan irrigation and hydro-electric scheme, valued at £25m.; the Escarvos training moles in Nigeria; the Accra sewerage scheme; and the new Baghdad international airport costing £8½m.

'I understand,' continued the Minister, 'that one of your members has just started work on a most interesting project involving an island oil-tanker terminal in the Persian Gulf. These great constructional works are a major contribution to the task of raising the standard of living in the under-developed parts of the world. Every project designed or built by British engineers enhances the prestige of our technical skill, and creates a favourable climate for our exports of capital and other goods, as well as earning international goodwill.'

Mr. Erroll concluded by mentioning a letter recently received by Mr. Macmillan from the Prime Minister of Turkey. It was one of congratulation on the admirable way in which British firms had completed a hydro-electric project in that country.

SCOTTISH BUILDER

Oil Terminal

THE REGENT OIL COMPANY is to build a £500,000 ocean terminal at Granton Harbour, Edinburgh. This terminal will occupy an area of 12 acres of land owned by a private company, Granton Harbour Ltd., and is situated on the south side of the Firth of Forth. The moment negotiations of the lease are concluded, work on the project will be let out to contract on a competitive basis. Construction will be directly controlled by Regent's engineering staff and completion is anticipated early in 1961.

In addition to being Regent's central distribution terminal from which the company's already extensive network of depots in Scotland will be supplied, direct delivery of all the products will also be made to customers in the Edinburgh area.

This is the third development of its kind. The first was the construction of a £500,000 ocean terminal at Cardiff docks. The second was a 2m. gallon storage depot at Hendon dock, Sunderland.

Scandinavian Building Success

PLANNING AND ORGANISATION of building in Scandinavia governed the successful evolution of the high storey construction which was a feature of recent years, Mr. T. Harlow Haddow, MICE, MIStructE, told the Scottish Association for Building Education in Glasgow at a conference held at Glasgow recently. To a much greater extent than in this country, he continued, the planners had decided the trend of construction and months of preparatory work led up to high speed economic construction of multi-storey blocks. Finishes were excellent and work immensely fast on the structural aspects.

In the morning session, Prof. Frank Fielden, FRIBA, of the Royal College of Science and Technology, said that the last 60 or 70 years had produced immense changes but that building techniques had advanced less speedily than in other fields. There was a lack of exact knowledge, and less money had been spent on building research than on many other industrial fields. He stressed the need for national standardisation of components and constructional equipment to allow faster and more efficient use of what the industry had to work with.

The Conference was the eighth arranged by the Scottish Association for Building Education.

SCOTTISH BUILDING TRADE WAGES

FOLLOWING are rates of wages authorised by the Scottish National Joint Council as from February 2, 1959. They apply to the whole of Scotland, including the islands of Orkney, Shetland, etc.

Grade A: Craftsmen, 4s. 9d.; Labourers, 4s 2½d.

For apprentices, the rates are:

Year	Percentage of Craftsman's rate	For week of 44 hours s. d.
1st	25	52 3
2nd	33⅓	69 8
3rd	50	104 6
4th	66⅔	139 4
5th	75	156 9

For female labour, the rates are:

	s. d.
Operatives on craft operations (at end of probationary period)	4 2½
Operatives on labouring operations (at end of probationary period) ...	3 8½

Cumbernauld New Town

A BROCHURE, 'Industry, Cumbernauld New Town,' which describes briefly the manifold advantages offered to industry by Cumbernauld New Town, has been issued by the Cumbernauld Development Corporation. Its object is to bring to the notice of the industrialist the vast and varied industrial potential at this New Town.

New Building

CUMBERNAULD.—Development Corpn. to build two factories, each of 20,000 sq. ft., which would be let at 3s. per sq. ft.

EDINBURGH.—Corpn. have been granted a Dean of Guild Court warrant to erect 240 houses and 37 garages at Oxgangs-cres. Est. cost £497,000.

FIFE CC.—Reconstruction and widening of Lochty Bridge, Thornton. Contract includes the realignment and regrading of existing approach roads. Applications to County S., County Offices, 'Belfield,' Cupar, Fife. Dep. £2 2s.

GLASGOW CORPN.—Proposed special sch. at Drumchapel site (No. 17). Several work contract. Applications to City A & Planning Officer, 20 Trongate, Glasgow.

GLASGOW.—600 houses will be built at Wick during next ten years to accommodate part of Glasgow's overspill population. The SSHA will build 300 of the houses.

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THE BUILDER CONSTRUCTION NEWS

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list, see previous issues. Those preceded by the symbol (A) are advertised in this number. The latest date for the receipt of tenders or applications appears above each paragraph. The symbol (R) preceding the entry indicates that applications must be received by this date.

BUILDING

FEBRUARY 29

(AR) DRAYTON RDC.—10 houses and bungalows at Cheswardine. C. Dep. £2 2s.

MARCH 1

(AR) SURREY CC.—Extension to Western Rd. county sec. boys and girls sch., Mitcham. County A.

(AR) WEST RIDING CC.—Conversion into flats of county owned police house at Weir-st., Todmorden. Divisional A., Flint-st., Huddersfield.

MARCH 2

(AR) PEMBROKESHIRE CC.—Erection of police station at Milford Haven. County A. Dep. £2 2s.

(AR) THORNABY ON TEES BC.—20 flatlets, wardens' quarters and communal and ancillary rooms. TC. Dep. £2 2s.

MARCH 4

(AR) EASTBOURNE CBC.—Workshop block and two-storey classroom, drawing office and laboratory block, being first stage of Eastbourne College of Further Education. TC.

(AR) WATFORD BC.—Erection of public convenience adjoining High-st. entrance of Oxhey Park. Boro' E&S. Dep. £2 2s.

MARCH 5

(AR) ESSEX CC.—Additions and improvements at West Bergholt Heathlands CoE prim. sch. County A.

MARCH 7

(AR) NEWCASTLE UPON TYNE CITY C.—95 garages at various sites. City Estate & Property S.

(AR) STROUD UDC.—108 single bedroom flats, 29 houses, 25 old people's bungalows, communal hall and warden's flat, two shops with flat over, and 30 garages, complete with outbuildings, services, footpaths and fences, at Lower Farmhill site, Paganhill. C. Dep. £5 5s. Tenders by April 2.

MARCH 8

(AR) UNITED NEWCASTLE UPON TYNE HOSPITALS.—Alterations to existing department of dermatology to form upgraded ward unit and out-patient dept. at Royal Victoria Infirmary, Newcastle. Secretary to Bd. of Governors.

MARCH 9

(AR) DURHAM CC.—(1) Additions and alterations, heating and dhw installation and hardwood block flooring, at Durham girls' grammar sch.; (2) erection of Shotton Hall county jun. sch., Peterlee. County A.

(AR) LEEDS REGIONAL HOSPITAL BD.—Fixed price tenders for re-organisation of laundry at Southmoor Hospital, Hemsworth. A. to Bd. Dep. £2 2s. Tenders by April 7.

MANCHESTER CITY C.—Alterations to Withington library. City A.

(AR) SOUTHEND-ON-SEA.—Erection of sports pavilion and public toilets at Blenheim Park, Leigh-on-Sea. Boro' A.

MARCH 10

(A) NEWCASTLE UPON TYNE CITY C.—Erection of ladies' public convenience at junction of Morden-st. and Percy-st. F. Austin Child & Donald Hall, architects, 6 Archbold-ter.

(AR) SOUTHEND-ON-SEA CBC.—Erection of central bus garage, London-rd. Boro' A.

(A) WOOD GREEN BC.—Fixed price tenders for repairs and adaptations at old Town Hall (phase 2). Boro' E. Dep. £1 1s.

MARCH 14

(A) SCARBOROUGH BC.—Fixed price tenders for 24 flats at Foxton's Farm, Scalby-rd. Boro' & Water E. Dep. £2 2s.

MARCH 15

CLARE (EIRE) CC.—12 houses, and works incidental thereto, on council's sites at Killaloe. County Secretary, Courthouse, Ennis. Dep. £5.

MARCH 16

(A) MACCLESFIELD BC.—Design, supply and erection of steelwork for factory at Hurdsfield. Boro' A. Dep. £2 2s.

(AR) WANDSWORTH MBC.—49 flats and maisonettes at Brixton Hill. TC.

MARCH 22

(A) CROYDON CBC.—Second stage of John Ruskin sports pavilion, Oaks-rd., Shirley. Ch. Ed. Officer. Dep. £1.

MARCH 23

(A) CARDIFF CITY C.—Fixed price tenders for site clearance, playing fields and site layout for proposed teacher training college at Cyncoed. City A. Dep. £2 2s.

(A) CARDIFF CITY C.—Fixed price tenders for rescue training set at Caerau-la., Ely. City A. Dep. £2 2s.

MARCH 28

(A) RUTLAND CC.—Extensions at Uppingham sec. mod. sch. County A. and Planing Officer. Dep. £2 2s.

(A) WIDNES BC.—Fixed price tenders for two science laboratories and ancillary accommodation at Fairfield county sec. sch. for boys. Boro' A. Dep. £2 2s.

MARCH 29

(A) SEVENOAKS RDC.—Fixed price tenders for houses and flats at Crouch House-la., Edenbridge. E&S. Dep. £2 2s.

APRIL 4

(A) STOURBRIDGE BC.—27 flatlets at Prescot-rd. Boro' E&S. Dep. £2 2s.

APRIL 8

(A) NEW SARUM CITY C.—Fixed price tenders for 40 houses, 24 flats and 11 bungalows, with outbuildings etc. at Bishopdown estate, Salisbury. City E.

APRIL 12

(A) SUNDERLAND CBC.—Erection of Sunderland Technical College, South Johnson-st. site. Boro' A. Dep. £2 2s.

APRIL 13

(A) NORTHAMPTON RDC.—52 bungalows, 12 houses and three club rooms on various sites. R. J. Miller, 1 Cheyne Walk, Northampton, architect. Dep. £3 3s.

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SERVICES, PAINTING, MATERIALS, ETC.

MARCH 5

(AR) SWANSEA CBC.—Electrical installation for aged persons' dwellings at Brenig-rd., Penlan. Boro' A. Dep. £5.

MARCH 7

ILKESTON BC.—Repainting of 552 corpn. houses at Kirk Hallam estate/Green-la. estate/Colmanhay estate. Boro' S.

MARCH 8

BIRMINGHAM CITY C.—Fixed price tenders for installation of phases 1 and 1A of central boiler-house scheme at workshops for the Blind, Woodville-rd., Harbourne. City E&S. Dep. £2 2s.

(A) WEST RIDING CC.—(1) Renewal of floors in hardwood strip flooring at Highfields sec. and prim. schools. (2) Internal and external painting of certain sch. premises in Don Valley Division. Divisional Ed. Officer, County Area Offices, Station-rd., Doncaster.

MARCH 11

(A) SOUTHPORT BC.—Supply, delivery and fixing of cloakroom fittings at new shower and changing rooms, King George V sch. Boro' A. Dep. £1 1s.

MARCH 12

(AR) SWANSEA CBC.—Electrical installation at Mynyddbach county sec. sch. for girls. Boro' A. Dep. £5.

MARCH 14

CANNOCK UDC.—Annual supplies. E&S.

(A) LIVERPOOL CITY C.—Painting, colouring and papering various properties at Vyrnwy Aqueduct. Water E.

MARCH 15

ESHER UDC.—External repainting of 20 houses, six bungalows and 12 flats at Grange-rd. and Brende-gdns., West Molesey. E&S. Dep. £1 1s.

MARCH 17

(AR) WIMBLEDON BC.—Painting of street lighting standards etc. Boro' S. Dep. £2 2s.

MARCH 18

BROWNHILLS UDC.—Annual supplies. E&S.

MARCH 26

(A) UXBRIDGE BC.—External painting of 498 dwellings at Hillingdon/Harefield/Uxbridge. Boro' E., S&A. Dep. £2 2s.

NO DATE

(A) CHELTENHAM BC.—External painting of 1,192 dwellings (eight groups) on various sites. Boro' E. Dep. £2 2s.

MUNICIPAL AND CIVIL ENGINEERING WORKS, ETC.

MARCH 7

TWICKENHAM BC.—Private street works.—350 lin. yd. of 9in. sewer; 3,300 sq. yd. of carriageway foundation (hardcore); 900 lin. yd. of kerbing and channelling, and 1,500 sq. yd. of paving, etc., at Coombe-cres./Coombe-rd./South-rd. Boro' E. Dep. £2 2s.

MARCH 8

KING'S LYNN BC.—Fixed price tenders for 4,615 sq. yd. of carriageways, 1,140 lin. yd. of sewers, and 719 lin. yd. of water mains, etc., at Hardwick Trading estate. Boro' E. Dep. £2 2s.

MARCH 9

BURY ST. EDMUNDS BC.—Supply of 1,000 tons of base course gravel asphalt and supply and laying, by mechanical spreader of 8,000 sq. yd. of wearing course gravel asphalt. Boro' E&S.

MARCH 11

HITCHIN UDC.—73 garages at four separate housing sites, with 1,600 sq. yd. of concrete aprons, 2,700 sq. yd. of surfaced hoggin forecourts, and soakaway drainage, etc. S. Dep. 2 2s.

NORTHAMPTON CBC.—3,450 sq. yd. of concrete carriageway and 460 lin. yd. of foul and SW sewers, etc. to form new road (Thornton-rd.). Boro' E. Dep. £2 2s.

MARCH 12

DORCHESTER BC.—Laying of 2,000 lin.

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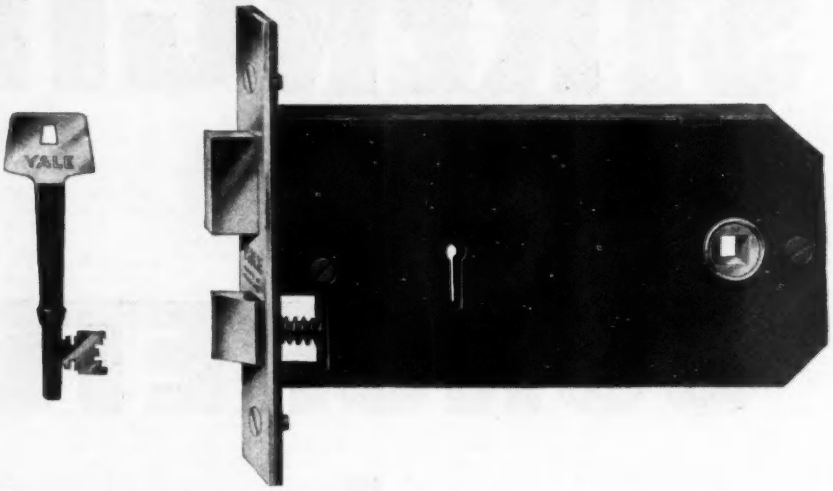

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- **Deadlock bolts reinforced with hardened steel pins.**
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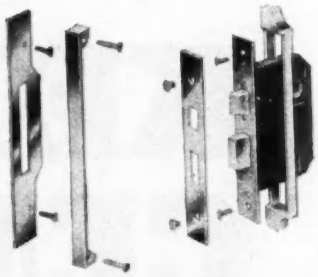

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yd. of 9in. dia. water main. Boro' E. Dep. £2 2s.

MARCH 14

ROSS & WHITCHURCH RDC.—12 miles of 3, 4 and 8in. dia. spun-iron water mains, two r.c. reservoirs and two pumping stations, etc. A. H. S. Waters & Ptnrs., engrs., 25 Temple-row, Birmingham, 2. Dep. £5 5s.

MARCH 16

EXETER City C.—Construction of SW sewers within Longbrook drainage area, comprising 3,000 yd. of 18 to 36in. dia. concrete ogee tubes; 6,700 yd. of 9 to 15in. dia. spigot and socket concrete pipes, and 3,600 yd. of 6 and 7in. dia. salt glazed stoneware pipes, etc. City E&S. Dep. £5 5s.

MARCH 17

UCKFIELD RDC.—Fixed price tenders for 7,380 yd. of 6in. dia. stoneware sewers and manholes, etc., at Hartfield. S. Dep. £2 2s.

MARCH 19

UPTON UPON SEVERN RDC.—1,117 yd. of 4 and 6in. dia. stoneware pipe, 14 precast manholes, and sewage disposal works, etc., comprising the Castlemorton Sewerage and Sewage Disposal Works. S. Dep. £5 5s.

MARCH 28

WAREHAM & PURBECK RDC.—(a) Three miles of 3 to 6in. dia. spun-iron water mains and laying of ½ mile of polythene tube as house connections. (b) Four miles of 6 and 9in. dia. concrete and stoneware sewers, one mile of 6in. dia. spun-iron rising main and two sewage pumping stations, etc., for Wool Water Supply and Sewerage schemes (second stage). E. Dep. £10.

MARCH 31

NEWBURY BC.—6,250 super yd. of 6in. r.c. carriageway, with foul and SW sewers, at Turnpike-rd. housing site. Boro' S.

GENERAL BUILDING WORK

(LONDON)

BETHNAL GREEN.—Acquisition of Sites.—Housing Com. of LCC propose to acquire sites of 0.27 acre at Cambridge Heath-rd. (occupied by a cinema), and 0.09 acre (comprising a public house) adjoining Teesdale estate, Bethnal Green. It is hoped to provide ten dwellings on the larger site. The est. cost of acquisition, clearance and partial redevelopment is £11,750.

DARTFORD. — Maintenance. — EC Sub-Com. of LCC recommend approval in principle to the maintenance by the Council of Dartford College of Physical Education, Kent. The improvements required at the College are est. to cost £100,000, including £18,000 for furniture and equipment.

DEPTFORD.—Flats and Garages.—MBC approved sketch plans and elevations for 21 flats and five garages at Wallbutton-rd./Pendrell-rd. site.

ENFIELD.—School.—Middlesex CC authorised erection of Chace sec. girls' sch., subject to MoE approval and consent to loan and planning permission. Est. cost £188,070.

ENFIELD. — School. — Middlesex CC authorised erection of Ambrose Fleming sec. sch., subject to MoE approval and consent to loan and planning permission. Est. cost £234,570.

HARROW.—Extensions.—Middlesex CC authorised completion of extension of Headstone sec. sch., subject to MoE approval and consent to loan and planning permission. Est. cost £149,570.

HESTON & ISLEWORTH.—Civic Centre Appointment.—BC appointed T. A. Lawton as architect for design of proposed civic centre, Lampton-rd., Hounslow.

ISLINGTON.—Hall of Residence.—EC Sub-Committee of LCC propose to acquire the freehold of the Northern Polytechnic's sports ground at Campdale-rd., Islington, at a cost of £17,000 for the erection of a hall of residence for 150 of the Polytechnic's students. The proposal to build a hall of residence is being considered by the MoE for inclusion in a further education building programme after that for 1961-62.

ISLINGTON.—Reconstruction of Baths.—MH&LG approval MBC scheme for reconstruction of Hornsey-rd. baths establishment. Est. cost £361,125.

LONDON.—School Building Programme.—MoE has agreed to include in the further education building programme for 1961-62 four of the eight projects submitted by the sub-committee. These four projects, whose value is about £1,010,000, are as follows:—Second stage (for 150 places) of hall of residence for Northampton College of Advanced Technology, completion of extension to Westminster Technical College, new buildings for Woolwich Day College, and new buildings for Barrett Street Technical College.

SOUTHALL.—School Extension.—Middlesex CC approved extension of county sec. sch., subject to MoE approval and consent to loan and planning permission. Est. cost £176,220.

SOUTHWARK. — Modernisation.—Housing Com. of LCC approved scheme for modernisation of Hunter Building, Borough-rd. dwellings at Southwark. The existing 20 two-room and 20-three-room flats will be converted into 21 two-room and nine three-room flats. The est. cost of modernising the flats, including incidental expenses, is £30,927.

STOKE NEWINGTON. — Five Storey Block.—MBC approved scheme for a five-storey block, comprising seven flats and 14 maisonettes at Aden-gro. Est. cost £47,850.

STOKE NEWINGTON.—QS Appointment.—E. C. Harris & Ptnrs. appointed quantity surveyors for new building at Brownswood branch library.

WEMBLEY.—Extension.—Middlesex CC authorised first phase of extension and adaptation of East-la. sec. scn., subject to MoE approval and consent to loan and planning permission. Est. cost £39,600.

WOOD GREEN.—New School.—Middlesex CC approved erection of new sec. sch., White Hart-la., subject to MoE approval and consent to loan and planning permission. Est. cost £258,525.

WOOLWICH.—New School.—The major building programme, 1959-60, includes provision for a new Roman Catholic primary school for 280 boys and girls at Abbey estate, Woolwich East. The managers' architects, Messrs. Tomei & Maxwell, have prepared a scheme in which the school, now named St. Thomas-à-Becket school, is planned with seven classrooms, an assembly hall, which will also be used for school meals, and a kitchen.

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MANCHESTER 3. 22 Bridge Street
NEWCASTLE-ON-TYNE 1 Pudding Chare
SOUTHAMPTON. 41 Lower Canal Walk

(PROVINCIAL)

ABERYSTWYTH.—BC to erect 50 flats at Penybont east site, Penparcau. Boro' E., L. Whittaker, to prepare lay-out plans for submission to council.

AINTREE.—Governors of Holy Rosary RC (aided) sch. propose two-form entry infants' sch. £42,350 est.

ASHTON UNDER LYNE.—BC propose new central bus station at Warrington-st.: BC approved plans for engineering workshop at Whitelands-rd. for R. Waddicor & Co. Ltd.

ATHERLEIGH (Lancs.).—CC propose new hostel for 30 males during 1960/61.

BAKEWELL.—UDC approved plans for 80 dwellings at Woodside estate for H. Boot & Sons Ltd., Sheffield: UDC approved in principle outline application for small factory at Ashford-rd. for Cintride Ltd., Sheffield.

BARNARD CASTLE—Boothman & Hillery Ltd., bldrs. merchants, Queen-st., Barnard Castle, to erect warehouse. Plans approved.

BARNSLEY.—BC propose new sec. mod. sch. for 600 pupils, and jun. and infants' sch. for 560 pupils at St. Helen's estate.

BASINGSTOKE. — North East Hants. Planning Com. recommend approval to plan for motel and restaurant at Wheatsheaf, North Waltham, for Strongs Brewery, Romsey: Lansing Bagnall Ltd. propose new 100,000 sq. ft. factory at Kingsclere-rd. site.

BERWICK.—Boots the Chemists Ltd., Nottingham, to extend their stores at Berwick. £20,000 est.

BERWICK.—Pringle of Scotland, Ltd., to extend their factory at Tweedmouth trading estate, Berwick.

BILLINGE & WINSTANLEY.—UDC propose new police station and library at Main-st., Billinge. Planning stage.

BILLINGTON.—RC Auth. propose sec. mod. sch. on site between Elker-la. and Billington Mill, £200,000 est. Work to commence April, 1961.

BIRMINGHAM.—TC approved plans for 40 flats with 16 shops under at Oxford-rd., Acocks Green, for Second City Properties Ltd., J. H. D. Madin, 83/85 Hagley-rd., Five Ways, Edgbaston, architect: TC also approved plans for 40 flats and seven shops at Coventry-rd. for Coronet Cinema (Small Heath) Ltd., £26,000 est.: *Following for Regional Hospital Bd.*—Diagnostic and treatment unit at All Saints Hospital, Winson Green, £477,000 est., central kitchen, cloakroom accommodation and staff dining block at Hallam Hospital, West Bromwich, £119,000 est., out-patients dept. at George Elliot Hospital, Nuneaton, £15,050 est., additional maternity accommodation at Victoria Hospital, Lichfield, £26,000 est., dual operating theatre suite and improvement of existing one at Selly Oak Hospital, Birmingham, £113,000 est., dispensary and pathological dept. at Yardley Green Hospital, Birmingham, £14,975 est.

BLACKBURN.—Daniel Thwaites & Co. (Star Brewery) Ltd., Blackburn, propose new PH at Shadsworth estate.

BOLDON (Co. Durham).—Scottish Brewers Ltd., Abbey Brewery, Edinburgh, seek permission to erect licensed premises at Hedworth-la., Boldon.

BOLTON.—CBC to build 37 bungalows at Whitegate-dr. / Helsby-gdns. / Parkgate-dr./Ashworth-la.

BOLTON.—Walmsley (Bury) Group Ltd., paper and board machinery manufacturers, planning a £100,000 single-storey factory on 75-acre site at Crompton Way, Bolton: Rutland Mills Ltd., furnishers, are undertaking a £100,000 extension scheme at their premises at Adelaide-st.

BOURNEMOUTH.—Proposal to replace Chewton Court Hotel, Highcliffe, with 48 flats, either in one block or three blocks of 16, being considered. A. G. Anderson, architect.

BRACKNELL.—New clinic and ambulance station proposed for Rochdale-rd., Bracknell. £41,000 est.

BRIDGNORTH (Salop).—BC propose 12 flats at Sydney Cottage estate.

BRIGHTON.—Planning Com. granted permission for new office block at Queen's-rd. on site of Moon Society's printing works for Thames Estates & Investments Ltd: Planning Com. granted outline application for covered swimming pool, squash and badminton courts, with pavilion and restaurant, bowling green, soccer field, riding school house and golf course at Saltdean for Saltdean Estate Co. Ltd.

BURNLEY.—Housing Com. to build 59 new flats and bungalows.

CARLISLE.—TC propose 100 houses at Norton housing estate: Robsons Border Transport Ltd., Durranhill industrial estate, Carlisle, to erect new 10,000 sq. ft. warehouse, N. M. Phillips, 43 Oxford-st., Workington, architect.

CASTLETON.—Chapel RDC propose 32 houses and 15 lock-up garages at Weaving-ave.

CHADDERTON (Lancs.).—EC propose adaptation and extension of Chadderton grammar sch. for girls as three-form entry sch. £23,153 est.

CHEADLE (Staffs.).—RDC approved following developments.—12 houses at Weston Coyney for Mr. J. E. Horton; swimming baths at St. John's Convent sch., Alton; 16 bungalows at Draycott for W. D. Cooke & Co., Ltd.; 10 houses at Caverswall for Mr. J. E. Horton; 26 bungalows at Forsbrook for Alsager Development Co., Ltd., and 26 bungalows at Weston Coyney for Elsby Brothers.

CHEADLE & GATLEY.—Council given by-law approval and conditional town planning consent to Lawefield Estates Ltd. for 41 houses at Foxland-rd. and Appleby-rd., Gatley.

CHESTER.—EC received Ministry approval to include new CoE sec. sch. in 1960/61 programme.

CHESTERFIELD.—BC propose new magistrates' courts: RDC approved draft plan for shopping/community centre and playing fields at Wingerworth: BC approved in principle new Free Church and Manse for Chesterfield and District Federal Free Church Council at Loundsley Green estate: BC approved in principle plans for five blocks of multi-storey flats at Peverill housing estate: RDC propose 1,000 houses during 1960/65.

CHESTER-LE-STREET.—Vaux & Associated Breweries, Ltd., Sunderland, applying to licensing authorities for permission to erect new PH at Waldridge-rd., Chester-le-Street. E. M. Lawson, Barras-bldgs., Barras Bridge, Newcastle-on-Tyne, architect.

COLWYN BAY.—Denbighshire EC propose new jun. sch. at Mochdre.

DARWEN.—RC Auth. propose new sec. mod. sch. at Ewood District. £95,000 est.

DUKINFIELD.—TC to invite Reema (Chesterfield) Ltd., to submit sketch plans for swimming baths scheme.

EASINGTON.—J. Nimmos & Son Ltd., The Brewery, Castle Eden, to erect licensed premises in town centre, J. Frank Johnson, architect: RDC planning construction of 12 bungalows at Station-rd., Blackhall, 10 bungalows at Davis-terr., Easington, and six houses at Haswell Plough.

FARNWORTH.—Lancs. EC propose completion of two-form entry infants sch. at Cherry Tree sch., £38,628 est.

FELLING.—M. Grady (Newcastle) Ltd., Broadwood-rd., Newcastle-on-Tyne, to erect 50 houses and 19 lock-up garages at Windy Nook, Fennell & Baddiley, Bridge End-chbrs., Chester-le-Street, Co. Durham, architects: William Leech Ltd., bldrs., St. James-st., Newcastle-on-Tyne, seek permission to carry out housing developments north of Sunderland-rd. and east of Wardley-la.: Outline plans for houses at Coldwell-la. and Leam-la. estate for UDC approved: Plans prepared by surveyor to Durham CC, W. B. H. Cotton, for construction of large roundabout and two bridges at White Mere Pool, £450,000 est.

GATESHEAD.—Housing Com. to erect 138 garages, £20,700 est.

GODSTONE.—MH&LG approved RDC scheme for 30 houses at Little Lullenden, Lingfield, and 16 aged persons' flats at Dormans Land.

GOSPORT.—Housing Com. of BC to submit following schemes to MH&LG for approval:—22 maisonettes and bungalows at Forton-rd./Mill-la., 26 bungalows and maisonettes at Walpole Park, 62 flats and garages at rear of Holy Trinity Vicarage, 30 flats at site of water police quarters, 14 old people's dwellings at Trinity Green, and 10 maisonettes at Hammond Court.

HANLEY.—North Staffordshire Spastic Assn. propose a training centre and workshop adjoining present clinic.

HARTLEPOOL.—TC to build 74 houses north of King Oswy-dr.

HEXHAM.—RDC to consider construction of council chamber at Council Offices, Prospect-hse.

ILKESTON.—BC propose 47 houses at Kirk Hallam No. 2 (North) site.

KENT.—EC of Kent CC considering an application for erection of dwellings at Skinners Farm, Edenbridge.

KIDDERMINSTER.—BC seek Ministry approval for 27 bungalows and garages at Greatfield-rd.

LANCASTER.—TC approved plans for 18 semi-detached houses and 13 lock-up garages at Denmark-st. for R. L. Dilworth Ltd. F. B. Jackson, 43 Church-st., architect.

LANCHESTER.—J. Biggam, bldr., Back Albert-rd., Consett, to erect 36 houses at Wesley-terr., Castleside. Eltringham & Lowes, Derwent-st., Blackhill, architects.

LITTLEBOROUGH.—Lancs EC propose three-form entry sec. sch. (less two classes) as instalment of future four-form entry sec. sch. during 1961/62 programme.

LONGTON (Lancs.).—Governors of New Longton CoE (aided) sch. propose hall, kitchen and classroom. £19,023 est.

MANCHESTER.—Regional Hospital Bd. approved revised estimate of £318,453 for new out-patients dept. at Chester Royal Infirmary.

MANSFIELD.—Notts. EC propose technical sch. for boys at Sherwood Hall. £182,866 est.

MIDDLESBROUGH.—Turner & Townsend, Linthorpe-rd., Middlesbrough, appointed quantity surveyors by TC for 42 flats at St. Hilda's, Middlesbrough: Alterations and additions proposed for dry cleaning works offices at Roman-rd. for Rapid Cleaners Ltd. Kitching & Co., Middlesbrough, architects: Plans approved for extensions to St. Joseph's RC prim. sch., Marton-rd., T. A. Crawford, architect: Boro' E., J. A. Kenyon, prepared plans for 109 houses at Easterside and 129 at Pallister Park for TC: G. Wimpey & Co. Ltd., to erect 25 houses at Trimdon-ave., Kader-ave., and Yearby-close.

MIDDLETON.—TC approved in principle a scheme for new Town Hall. £500,000 est.

MILLOM.—RDC propose 24 bungalows at Devonshire-rd.

MILNROW.—Lancs CC propose six-form entry sec. sch. as instalment of eight-form entry sch. during 1960/61 programme.

NANTWICH.—RDC to build further 50 bungalows for old people, bringing total to 98.

NEWCASTLE ON TYNE.—Newcastle Breweries Ltd., Haymarket, Newcastle, to erect an office block at Heber-st.: About £22,000 is to be spent by Boots the Chemists Ltd., Nottingham, on alterations to their stores at Newcastle on Tyne: City C to erect dwellings accommodation for about 1,000 families, in Sycamore-st. area.

NEW FOREST (Hants).—RDC seeking MH&LG consent for £23,450 loan for block of six shops with flats over at Butts Ash, Hythe: RDC submitted 1960 housing programme to MH&LG for approval.

NEW MILTON (Hants).—Hampshire Planning Com. has given Lymington BC permission to develop seven acres of land at Gore-rd., New Milton.

NEWTON LE WILLOWS.—Lancs. EC propose extensions and adaptations to College of Further Education, £24,000 est.

NORTHAMPTON.—BC propose a two-storey civil defence building at Grafton-st. £20,000 est.

NORTHWICH.—UDC propose four houses and 30 bungalows at Malpas-rd. site.

NOTTINGHAM.—EC propose following for 1960-61 programme.—Two form entry at Toton-la. county sch., Stapleford, £112,423 est.; four form entry at Blidworth county sch., £186,634 est.; three form entry at Worksop county grammar sch., £186,654 est.; three form entry at West Bridgford county technical sch., £175,038 est.; three form entry at Carlton technical county sch. £175,038 est.; three form entry at Newark Hercules Clay county sch. £82,850 est.; and accommodation for 120 residential pupils at Hopwell Hall special sch., £55,403 est.

NUNEATON.—BC propose old people's dwellings and traditional houses at Bridge-st./Heath End-rd./Meadow-st./Queen Elizabeth-rd., Camp Hill estate: BC approved plans for 36 dwellings at Brandean-ave. for G. Wimpey & Co. Ltd., London.

ORMSKIRK.—Parochial Church Council propose new church sch. at Rufford, £22,000 est.: West Lancs. RDC propose 62 bungalows at Thornton (eight), Hesketh Bank (eight), Bickerstaffe (eight), Maghull (26), and Aintree (12).

PONTELAND.—Cordar Ltd., Dean-st., Newcastle-on-Tyne, to erect new factory at Ponteland. C. S. Errington, 46 Grainger-st., Newcastle-on-Tyne, architect.

RADCLIFFE.—Lancs. EC propose two additional classrooms, kitchen and dining room at county sec. sch. £23,485 est.

RAINFORD.—UDC propose 10 bungalows and 16 houses at Derby-dr.

Contracts Placed

We are glad to receive from architects and quantity surveyors for publication details of contracts placed to the value of £20,000 or over. Such information should reach the Editor as soon as possible after the contract is signed. Names of the architect and other consultants associated should be given.

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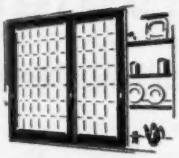

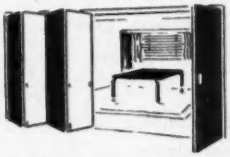

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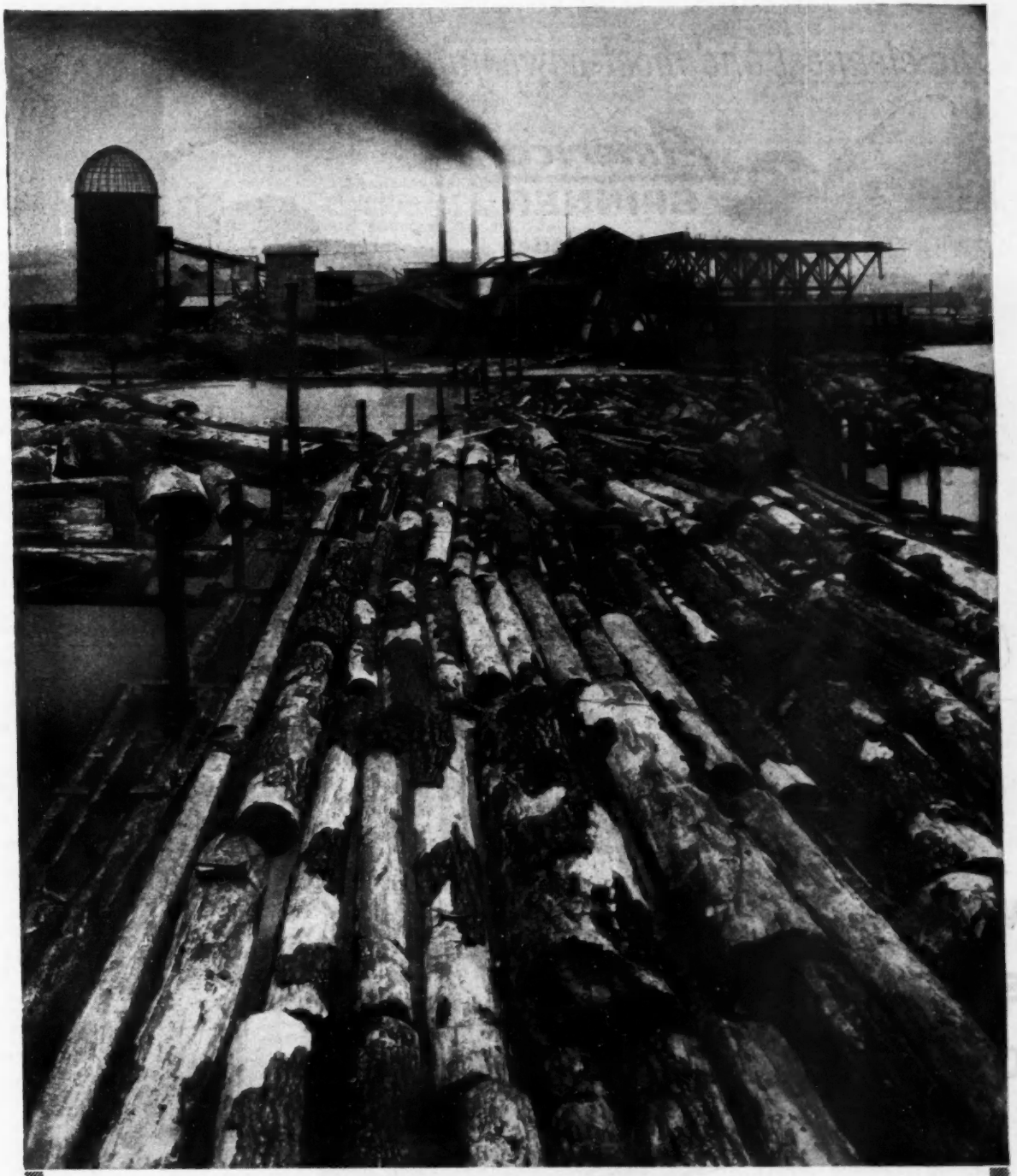

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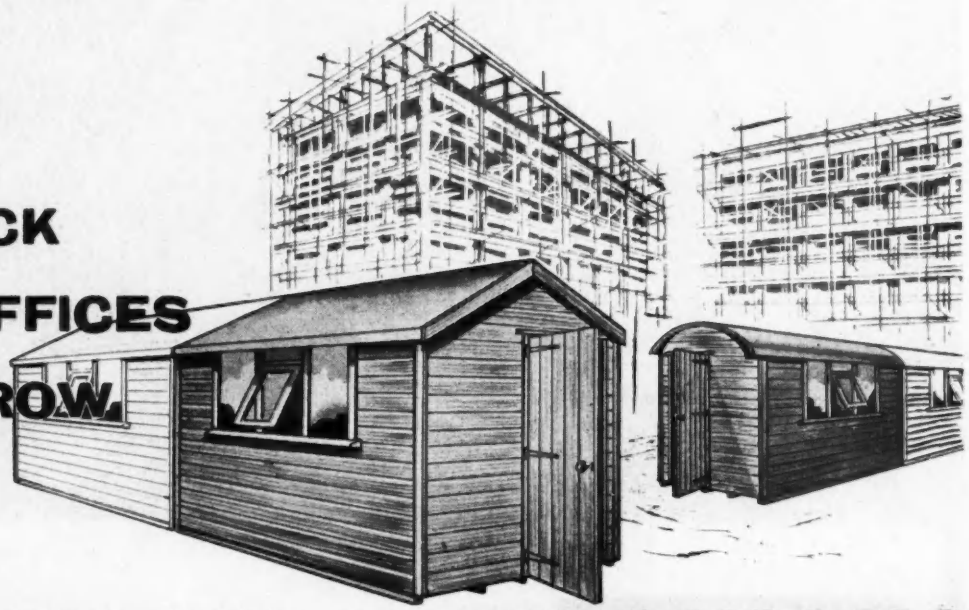

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DEPT. 51 WORCESTER STREET, WOLVERHAMPTON. TEL: 25028/9.
DEPT. 51 MOLINEUX WORKS, BILLERICAY, ESSEX. TEL. 274.

WERNICKS for EXTENDABILITY

RICHMOND (Yorks).—RDC seek loan sanction of £19,611 for sewerage scheme to serve Darlington-rd. area.

SALISBURY & WILTON. — MH&LG approved building of 49 new houses at Winterslow (13), Whiteparish (11), Laverstock (16), Compton Chamberlayne (3), Redlynch (4) and Berwick St. James (2): RDC approved in principle proposal by Lord Herbert to build 12 houses at South Newton.

SHREWSBURY.—Salop EC approved, in principle, re-building of Wyle Cop Youth Club, £20,000 est.: EC propose extension to Farm Institute, Walford, £23,700 est.

SILSDEN.—UDC propose 32 houses during 1960.

SOUTH SHIELDS.—Boots the Chemists Ltd., Nottingham, to spend about £35,000 on reconstructing their shop premises at King-st., South Shields: Corpn. to buy more land nr. Victoria-rd for flats.

STOCKPORT.—BC to negotiate with G. Wimpey & Co. Ltd. for 63 dwellings at Canal Bridge Farm estate: BC to negotiate with Unity Housing Ltd. for 54 dwellings at Canal Bridge Farm estate.

STOCKTON ON TEES.—J. W. Cameron & Co. Ltd., Lion Brewery, West Hartlepool, to erect PH at Maple-rd., Gilpin Brown estate, Stockton.

STRETFORD.—Lancs EC propose instalment (2nd) of three-form entry RC sec. sch. for girls during 1961/62 programme: BC approved plans for extension to works at Elevator-rd., Trafford Park, for Locomotors Ltd.

SUNDERLAND.—CBC recommend approval for 20 houses for sale on land at Percy-st./St. Albans-st./Ashby-st.: Flowers Breweries (Northern) Ltd., planning erection of PH's in Sunderland.

TYNEMOUTH.—Plans approved for 22 houses at Kimberley-ave. for J. H. Rogers, Regent-terr., North Shields.

UTTOXETER.—UDC propose alterations to Town Hall, £20,000 est.

WALLSEND.—Plans submitted to MoE for first stage, est. to cost £10,000, of proposed alterations and remodelling of St Aidan's RC sch., Rosehill, Wallsend. D. Brown, 10 Lambton-rd., Jesmond, Newcastle-on-Tyne, architect.

WEST HARTLEPOOL. — EC approved plans for extending girls' high sch. and approval of MoE being sought. L. Auton, Regents-bldgs., York-rd., West Hartlepool, architect.

WEST RIDING.—EC propose improvements at Dent CE (aided) sch., £12,843 est.

WHITWORTH.—Lancs EC propose three-form entry sec. sch. (less two classes) during 1961/62 programme.

WIGAN.—Corpn. to apply for £18,000 loan sanction for 13 additional houses at Worsley Mesnes.

WILMSLOW.—Cheshire EC propose four-form entry sec. mod. sch. for boys at Thorngrove-rd.

WIMBOURNE (Dorset).—Application to construct motel at East Borough made by A. W. Lambert. Plans comprise two bars, two lounges, a restaurant and a 'carport'—accommodating 40 cars—with 24 bedrooms above. Est. cost £60,000.

WINCHESTER.—Large scale modernisation programme proposed for Winchester Barracks. £500,000 est.

WORSLEY.—Lancs EC propose increasing Worsley Hulton and Hilton Lane county sec. schools by two-form entries in lieu of previously proposed new four-form entry sec. sch., Worsley.

TENDERS

(A) Denotes *accepted*.
(PA) Denotes *provisionally accepted*.
(RA) Denotes *recommended for acceptance*.
(AM) Denotes *accepted subject to modification*.
(GD) Denotes *accepted subject to approval by appropriate Government Department*.

ASHFORD.—Erection of RC sec. sch. at Park-rd., Ashford, Middx., for CC. (A) C. J. Simms Ltd., £140,800.

BARKING.—30 dwellings at Howard-rd./Morley-rd. for BC (GD) Hawker-Smith Ltd., Bexley, Kent, £55,074.

BARNSLEY.—Development of Mount Vernon Hospital for Sheffield Regional Hospital Bd. (A) Arthur Waterman Ltd., Gelderd-rd., Leeds 12, £224,062.

BEDFORD. — Following for BC:—22 houses for sale at Mallard-hill and Robinhill. (GD) Gambriel & Sugars Ltd., £46,011. —Six shops and maisonettes, with garages, at Priory-st. (GD) W. J. Bushly Ltd., £35,458.

BLACKPOOL.—84 flats at Mereside estate for BC. (A) R. Fielding & Son (Builders) Ltd., £109,300.

BOGNOR REGIS.—11 dwellings at Selsey Bill, Bognor Regis, Sussex, for Rathmore Development Co. (A) H. W. Barnes & Son Ltd., 6 Gibbon-rd., SE15. Est. cost £13,000.

BRANDON.—Proposed clearance of site of Littleburn Colliery for UDC. (GD) Shellabear Price Ltd., Auckland-hse., New Zealand-ave., Walton-on-Thames, £25,000.

CANVEY ISLAND.—190 dwellings, four shops, and 47 garages for UDC. (A) F. P. Smith (Thurrock) Ltd., £260,870.

CARDIFF.—Fuel oil terminal at Cardiff for Regent Oil Co. Ltd. (A) John Brown Ltd. (main contrs.) and Whessoe Ltd., Darlington (tankage). Est. cost £500,000.

DOUGLAS (Isle of Man).—Terminal building at central bus station for TC. (A) A. M. Grimshaw Ltd., Onchan, £29,789.

GATESHEAD.—138 houses for North-Eastern Housing Assn., Windsor-terr., Newcastle on Tyne. (GD) John Twiname Ltd., Allerdale-hse., Brigham, Cumberland.

GOSFORTH.—30 houses and flats and six garages at Coxlodge estate for UDC. (A) Cussins (Contractors) Ltd., The Drive, Gosforth, £30,715.

GOSPORT.—Following for BC:—150 houses at Bridgemary site. (A) John Laing & Sons.—55 houses at South-st. site. (A) George Wimpey & Co. Ltd.

HAMPSHIRE.—Erection of Portchester county jun. sch. for CC. Venning, Hope & Ptnrs., quantity surveyors. (A) J. V. Figgins (Builders) Ltd., 271a London-rd., Portsmouth, Hants, £53,737.

HORNCHURCH.—14 old people's bungalows at Wantz-la., Rainham, for UDC. (GD) J. Leary & Sons Ltd., London, E15, £20,432.

LEEDS.—85 houses at Queenshill Housing site for Leeds Jewish Housing Assn. (A) N. B. Bell & Co. Ltd., £131,264.—201 dwellings at Ebor Gardens for TC. (A) Reema (Chesterfield) Ltd., Storforth-la., Chesterfield, Derbys, £351,470.—42 dwellings at Swinnow estate and 46 at Moor Grange estate for TC. (A) N. B. Bell & Co. Ltd., £110,384.

LIVERPOOL.—Artificial limb fitting centre at Mill-rd. Maternity Hospital for Regional Hospital Bd. (A) Wm. Hall & Son Ltd., 60 Christian-st., Liverpool 3, £71,085.—Erection of building on corner of Water-st. and Drury-la. for Commercial Union Assurance Co. Daniel Watney, Eiloart, Inman & Nunn, architects. G. D. Walford & Ptnrs., quantity surveyors. (A) H. Fairweather & Co. Ltd. Est. cost £250,000.

LONDON. — Old people's dwellings at Hallfield, Paddington, for Paddington MBC. (A) Stewart & Ptnrs. Ltd., Baker-st., W1, £52,194 (firm price tender).—Following for Walthamstow MBC:—21 flats, 16 maisonettes and 11 garages at Avon-rd./Fyfield-rd. site. (GD) Seivad Ltd., £61,360.—Factory at Grange-rd. (GD) The Porter Construction Co., £12,909.

LONDON.—Erection of open air theatre at Bishop's Park for Fulham MBC. (A) W. J. **Marston & Son Ltd.—Dwellings at Kingston-**st. housing site for Soutnwark MBC. (A) William Willett (Contractors) Ltd.

LONDON CC.—Provision and installation of electric water-heaters in 457 dwellings at Watling estate, Hendon.

Ellis (Kensington) Ltd.	£28,114
Stitson, White & Co. Ltd.	26,482
J. C. Spooner (Heating) Ltd. ...	26,431
Wm. Edgar & Son Ltd.	25,631
(A) F. J. Baynes & Co. Ltd.	25,232

Director of housing's comparable estimate is £25,193.

LONDON CC.—The erection of three-storey wing at annexe to Clapton Park county sec. sch. at Chelmer-rd. (Hackney Central).

Wm. J. Jerram Ltd.	£24,380
J. & C. Bowyer Ltd.	23,828
Walter Gladding & Co.	22,981
T. R. Roberts (Builders) Ltd. ...	22,398
Harrison & Spooner Ltd.	22,335
Howard & Co.	22,293
(A) R. J. Truscott Ltd.	21,045

Architect's comparable estimate is £19,863.

(GD) LONDON (Air Ministry).—Contracts to the value of £500 or over for week ended February 19:—*Building work* (2 *contracts*): Cottesmore, Rutland, Spooners (Hull) Ltd., Stoneferry, Kingston-upon-Hull, Yorks.; Leconfield, Beverley, Yorks., J. Mather & Son Ltd., Leeds-rd., Stoneferry, Hull, Yorks.; Biggin Hill, Kent, G. T. Crouch Ltd., Kingston-hse., Stephenson-way, Three Bridges, Crawley, Sussex; Wittering, Northants., Robert Marriott Ltd., Midlands-wks., Rushden, Northants. *Building work (demountable and prefabricated)*: Aden and Bahrein, W. J. Simms Son, Cooke Ltd., Haydon-rd., Sherwood, Nottingham; Various RAF stations overseas, Cawood Wharton & Co. Ltd., Constructional dept., Southlands, Harrogate, Yorks. *Building work and artificers' work:* Feltwell, Norfolk, Laughton & Fuller Ltd., 51 High-st., Brandon, Suffolk. *Artificers' work:* Swinderby (Lincs.), etc., W. & J. Simons Ltd., 12 Friar's-la., Lincoln. *Installation work (complete heating)*: Kinloss, Morayshire, Brightside Heating & Engineering Co. Ltd., 6 Lyne Doch-cres., Charing Cross, Glasgow, C3. *Surfacing work:* Wick Airport, Caithness, William Tawse Ltd., Angusfield, Aberdeen. *Painting work:* Croydon, Airport, Surrey, South London Decorators Ltd., 9/11 Streatham High-rd., London, SW16. *Waterproofing (roofs)*: Colerne, Wilts., Field & Palmer Ltd., Station-rd., Wood Green, London, N22.

(GD) LONDON (British Railways).—Contracts placed by Eastern Region:—Drake & Gorham (Contractors) Ltd., 36 Grosvenor-gdns., London, SW1, supply, delivery and erection of electrical installation in sheds Nos. 2 and 3 at Stratford diesel maintenance depot.—Samuel Williams & Sons Ltd., Chequers-la., Dagenham Dock, Essex, construction of subway, concrete retaining wall and wing walls at Benfleet Station.—Walter Lawrence & Son Ltd., 31 Sun-st., London, EC2, new building for automatic telephone exchange at Seven Sisters.—A. Reyrolle & Co. Ltd., Hebburn, Co. Durham, supply, delivery and installation of three type 'ORT4' circuit breakers for Neepsend Substation.—Holliday & Greenwood Ltd., 11 Buckingham Palace-gdns., London, SW1, construction of inspection pits on piled foundations together with foundations, steel portal frames, cladding, etc., for inspection shed and also the construction of pump house and foundations for oil storage tanks, substation and transformer for diesel servicing and fuelling depot at Colchester Station.

(GD) LONDON (British Railways).—Contract placed by North Eastern Region: Ludwell & Co. Ltd., Leamington Spa, extension to a workshop at the civil engineer's Leeman-rd. depot, York.

(GD) LONDON (Metropolitan Police).—Result of tender for building work: Erection of married quarters, St. Barnabas-rd., Micham, Surrey, William Willett (Builders & Decorators) Ltd., £17,546.

(GD) LONDON (MoW).—Contracts placed for week ended February 13:—*Aberdeenshire:* DSIR, Torry, erection of marine store, Donald C. Stewart, Building Contractor, 18 Ellon-rd., Bridge of Don. *Carmarthenshire:* Post Office, Ammanford, alterations and adaptations, T. Richard Jones, Dolwerdd, Bettws, Ammanford. *Durham:* Post Office, 40 Holmeside, Sunderland, adaptations to post office garage, Matthew Dunn, 40 Nile-st., Sunderland. *Essex:* Branch Post Office, Pitsea, erection, H. E. Judd & Son Ltd., High-rd., Laindon, Basildon. *Lancashire:* Post Office and sorting office, Middleton, erection, E. E. Colman Ltd., Waverley-rd., Sale, Cheshire; Head Post Office, County-sq., alterations and extensions, Barrow Bros. (Builders, Lancaster) Ltd., Bulk-rd., Lancaster. *London:* Post Office, Belgrove-hse., Belgrove-st., King's Cross, WC1, internal decoration, Sykes & Son Ltd., 8 Essex-st., Strand, WC2; Natural History Museum, SW7, new mezzanine floor, A. Roberts & Co. Ltd., 79 Ecclestone-sq., SW1; Clissold telephone exchange, extensions and alterations, Pitchers Ltd., 57 Ashburton-gro., N7. *Midlothian:* Sighthill Post Office, supply depot, Edinburgh, patent glazed canopies to loading banks at sheds, Peter Heatley & Co. Ltd., Engineers & Contractors, 17 Elbe-st.,

Leith, Edinburgh, 6. *Middlesex:* Government training centre, Walgate-rd., Perivale, new rehabilitation unit, E. J. Lacy & Co. Ltd., Steel-rd., NW10. *Northumberland:* Ministry of Pensions and National Insurance, Benton Park-rd., Newcastle-upon-Tyne, internal cleaning and redecoration, Adam Robertson & Son, 36 Leazes Park-rd., Newcastle-upon Tyne. *Staffordshire:* Post Office, High-st., Cheadle, adaptations to form new sorting office, Mollatts (Hanley) Ltd., 2 Hill Church-st., Hanley, Stoke-on-Trent. *Surrey:* Post Office, Queen's-rd., Richmond, erection of standard motor transport workshop, Walter Thompson (Contractors) Ltd., North-rd., Northallerton, Yorks. *Warwickshire:* Post Office Supplies, Fordrough-la., Birmingham, regrading of road, J. J. Gallagher Ltd., 28/36 Lea-rd., Birmingham, 11.

(GD) LONDON (War Dept.).—Contracts placed for week ended February 12:—*Berkshire:* (Didcot), roadwork, Constable Hart & Co. Ltd., Cosham; fencing and planting, Forest Development Co., Chackmore, Buckingham. *Essex:* (Colchester), building, T. J. Evers Ltd., Tiptree, Essex; building, Farrans Ltd., London, W1. *Hampshire:* (Winchester), miscellaneous, Woolford & Sons Ltd., Winchester. *Herefordshire:* (Hereford), painting, T H. Kenyon & Sons Ltd., London, W9. *Merionethshire:* (Tonfanau), roadwork, bituminous Surfacing Ltd., Manchester. *Somerset:* (Shepton Mallet), miscellaneous, S. W. Foster Ltd., Radstock. *Wiltshire:* (Warminster), roadwork, Constable Hart & Co. Ltd., Cosham; (Farleigh), miscellaneous, A. Wills & Sons Ltd., Bath. *Worcestershire:* (Honeybourne), fencing, Fencraft Engineering Ltd., Grantham; resheeting, Maurice Hill Ltd., Horndean. *Yorkshire:* (Strensall), building, G. W. Ledger, Harrogate.

NEWCASTLE ON TYNE.—Construction of regional neurological centre at Newcastle Regional Hospital Bd., Benfield-rd., Newcastle on Tyne. (A) Crudens Ltd., Musselburgh, Scotland, £382,520.—Erection of bulk food stores and offices and extensions to kitchen at General Hospital for Newcastle Regional Hospital Bd. (A) Harry Kindred Ltd., £43,083.

NEWCASTLE UPON TYNE.—630 flats at Pottery Bank and Scotswood-rd. redevelopment area for City C. (A) George Wimpey & Co. Ltd., £1,358,715.

NEW MALDEN.—New factory at New Malden for Quillot Ltd., 74 Lenelly-rd., Surbiton, Surrey. (A) Baileys (Builders & Contractors) Ltd., New Malden, Surrey.

NOTTINGHAM.—Community centre at Farnborough-rd. for TC. (A) Vic Hallam Ltd., Langley Mill, Notts., £11,746.—Building and design centre at Mansfield-rd. for TC. (A) Thomas Bow (Nottingham) Ltd., £52,912 (negotiated tender).—Four classroom instalment at St. Edward's RC prim. sch. for EC. (A) M. D. Sweeney & Palmer Ltd., Beechdale-rd., Aspley, £19,816.

PETERBOROUGH. — Development of Memorial Hospital (phase one) for East Anglian Regional Hospital Bd. (GD) George Wimpey & Co. Ltd., £292,799.

READING.—New meat depot for Shropshire Fat-stock Society. Howell, Freeman & Batte, 17 Blagrave-st., Reading, architects. Cooper & Sons, quantity surveyors. (A) J. M. Jones & Sons Ltd., Maidenhead.

SHEFFIELD.—Sec. sch. for girls at Hindehse. for TC. (A) J. W. Sivil Ltd., Canterbury-ave., Sheffield 10, £198,162.—Alterations and improvements at All Saints sch. for TC. (A) B. Powell & Son Ltd., Cavendish-st., Sheffield 3, £19,142.—Rebuilding of Black Swan Hotel, Snig-hill, for Samuel Smith's Old Brewery (Tadcaster) Ltd. Cawkwell & Davidson, architects. (A) John Eshelby & Son, Sheffield 3. Est. cost £135,500.

STOCKPORT.—Old people's home at Newlands for BC. (A) E. E. Coleman Ltd., Waverley-rd. Works, Sale, Ches., £63,972.

SUNDERLAND.—Reconstruction of shop premises at Fawcett-st. for Messrs. Hope Brothers. (A) W. G. Riddle & Son, 123 Chester-rd., Sunderland.

SWANSEA.—Erection of 2nd phase of Mynyddbach county sec. sch. for girls at Mynyddbach for CBC. Quantities by Boro' A. (RA) Bennett Bros. (Contractors) Ltd., Carlton-terr., Swansea, £182,098.

WEST HARTLEPOOL.—Supply and erection of steelwork for proposed Brierton-hill sec. technical sch. for girls for EC. (A) Teesdale & Metcalfe Ltd., Wetherby, Yorkshire, and Windsor Construction Ltd., Windsor (pre-cast concrete floors and roof).

WIGTON.—Construction of additional groynes in connection with sea defence works at Silloth for RDC. (A) Harbour & General Works Ltd., Howdon-on-Tyne, Northumberland, £22,172.

WORKSOP.—Pathology laboratory and out-patients' department at Victoria Hospital for Sheffield Regional Hospital Bd. (A) J. E. Smith Ltd., Kilton-rd., Worksop, £22,502.

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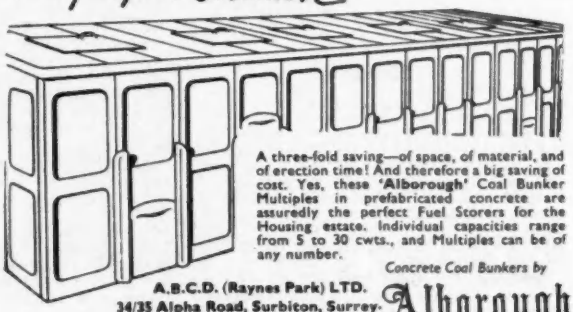
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CONTRACTS

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.

EDUCATION DEPARTMENT.
Don Valley Divisional Executive.

TENDERS are invited for (1) RENEWAL OF FLOORS, in hardwood strip flooring, at the Highfields Secondary and Primary Schools, Highfields, near Doncaster, and (2) INTERNAL AND EXTERNAL PAINTING OF CERTAIN SCHOOL PREMISES in the Don Valley Division.

Specifications and Forms of Tender are obtainable from the Divisional Education Officer, County Area Offices, Station-road, Doncaster, to whom completed Tenders must be returned by not later than 12 NOON on TUESDAY, 8th MARCH, 1960.

STROUD URBAN DISTRICT COUNCIL.

HOUSING.

TENDERS are invited from Building Contractors for the ERECTION of:
108 SINGLE-BEDROOM FLATS IN SIX THREE-STOREY BLOCKS.
29 THREE-BEDROOM HOUSES.
25 OLD PEOPLE'S BUNGALOWS.
1 COMMUNAL HALL AND WARDEN'S FLAT.
2 SHOPS EACH WITH THREE-BEDROOM FLAT OVER.
30 GARAGES.

Complete with Outbuildings, Services, Footpaths and Fences, on the Lower Farmhill Site, Paganhill, Stroud.

Application for Bills of Quantities and Forms of Tender to be made to the undersigned on or after 7th MARCH, 1960, accompanied by a deposit of £5 5s. (made payable to Stroud Urban District Council) which will be refunded on receipt of a bona fide tender not subsequently withdrawn.

Drawings can be inspected prior to and after issue of Bills of Quantities at the Council Offices or at the office of the Council's Architect, I. M. Williams, Esq., A.R.I.B.A., Claremont-house, 67 Montpellier-terrace, Cheltenham, Glos.

All queries of a technical nature to be addressed to the Architect.

Tenders are to be delivered to the undersigned not later than the FIRST POST ON 2ND APRIL, 1960, and no tender submitted after this date will be considered.

The Council does not bind itself to accept the lowest or any tender.

H. S. GIBBONS,
Clerk to the Council.

Council Chambers,
High-street,
Stroud.

BOROUGH OF WOOD GREEN.

OLD TOWN HALL—REPAIRS AND ADAPTATIONS (PHASE II).

The Council invite FIXED PRICE TENDERS for the above.

Plans, Specification and Form of Tender may be obtained from the Borough Engineer at the address below (where Conditions of Contract may also be inspected) upon payment of a deposit of £1 1s., which will be refunded on the submission of a bona fide Tender, provided the latter is not withdrawn.

Tenders, in plain sealed envelopes endorsed "Tender for Repairs at Old Town Hall," but with no name or mark indicating the sender, must be delivered to the undersigned not later than noon on THURSDAY, 10th MARCH, 1960.

G. W. PLATER,
Town Clerk.

Town Hall,
Wood Green,
N.22.
18th February, 1960.

RUTLAND COUNTY COUNCIL.

EDUCATION COMMITTEE.

PROPOSED EXTENSIONS UPPINGHAM SECONDARY MODERN SCHOOL.

TENDERS are invited for the CONSTRUCTION OF EXTENSIONS to the Uppingham Secondary Modern School, Uppingham, in the County of Rutland.

The extensions consist of a new Hall/Gymnasium, two classrooms, Library, Art Room and Work Shop block, together with ancillary accommodation.

Bills of Quantities and Form of Tender can be obtained at the office of the County Architect and Planning Officer, where drawings can also be inspected on or after the 5th MARCH, 1960, on payment of £2 2s. 0d. deposit, which will be returned on receipt of a bona fide Tender.

Tenders which should be in a plain sealed envelope marked "Tender—Extensions Uppingham Secondary Modern School" should be returned to reach the undersigned not later than 10 a.m. on MONDAY, 28th MARCH, 1960.

A. BOND,
Clerk of the County Council.

County Offices,
Catmose,
Oakham,
Rutland.
16th February, 1960.

EAST SUFFOLK COUNTY COUNCIL.

ERECTION OF LOTHINGLAND MODERN SCHOOL.

The Council propose to invite firm price TENDERS from selected builders for the ERECTION OF THIS SCHOOL OF 26,500 SQUARE FEET FLOOR AREA, in the grounds of Lound Hall, near Lowestoft.

Drawings, prepared under the direction of Mr. E. J. Cundiffe, A.R.I.B.A., County Architect, can be seen at the County Hall, Ipswich, and on the site between 9 a.m. and 4 p.m.

Building Contractors wishing to Tender should submit their names to the County Architect, County Hall, Ipswich, before the 7th March, 1960. From the names submitted a number of builders will be selected and these will be furnished with Bills of Quantities, etc., on or about the 14th March; builders not selected will be notified at the same time. Tenders are required by the 7th APRIL, 1960.

CITY OF LIVERPOOL.

WATER DEPARTMENT.

TRYWERYN DAM AND ANCILLARY WORKS.

TENDERS invited for the CONSTRUCTION, in the Tryweryn Valley, Merionethshire, North Wales, of EARTH DAM SOME 150 FEET HIGH and containing some 3 million cubic yards of materials together with tunnels, concrete structures and ancillary works.

Documents from Messrs. Binnie, Deacon and Gourley, Artillery House, Artillery Row, Westminster, S.W.1, between 1st MARCH and 1st APRIL, 1960. (Deposit £5, payable City Treasurer, Liverpool.)

Tenders returnable by noon, 16th MAY, 1960.

THOMAS ALKER,
Town Clerk.

(J.6045.)

BUCKINGHAMSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited from contractors wishing to TENDER for the following building projects:

Slough, William Penn C. Secondary School. ERECTION OF NEW KITCHEN, cost in the region of £20,000.

Marsh Gibbon C. of E. School. ERECTION OF TWO CLASSROOMS, cost in the region of £10,000.

Bledlow Ridge C.P. School. ERECTION OF TWO CLASSROOMS, cost in the region of £10,000.

High Wycombe, Mill End Secondary Modern School. ERECTION OF A SCIENCE LABORATORY, cost in the region of £12,000.

Contractors are asked to make application to the County Architect, County Offices, Aylesbury, indicating for which works they wish to tender as soon as possible. A deposit of £3 3s. for Bills of Quantities is required for each project which will be returned on receipt of a bona fide tender not subsequently withdrawn, or in such other circumstances as the Council may approve. Bills of Quantities will be available 7th MARCH, 1960, and tenders returned by 28th MARCH, 1960.

The Council do not bind themselves to accept the lowest or any tender.

COUNTY COUNCIL OF ESSEX.

WEST BERGHOLT HEATHLANDS C. OF E. PRIMARY SCHOOL. ADDITIONS AND IMPROVEMENTS.

Contractors wishing to submit a firm price TENDER FOR THE ABOVE should forward their names, from which a panel will be chosen and provided with Tender documents.

The work consists of a new classroom in traditional construction and improvements to sanitary accommodation, estimated cost £5,000. The private architects for this contract are Sparrow & Clater, North Hill, Colchester.

Applications to reach the undersigned not later than 5th MARCH, 1960.

H. CONOLLY,
C.B.E., F.R.I.B.A.
County Architect.

County Hall,
Chelmsford.

BOROUGH OF WREXHAM.

NEW GUILDHALL.

TENDERS FOR INTERNAL TELEPHONE SYSTEM.

The Wrexham Town Council proposes to consider a list of Firms/Companies to be invited to TENDER for the SUPPLY AND INSTALLATION OF AN INTERNAL TELEPHONE SYSTEM (P.A.X) at its New Guildhall now in course of erection.

Firms/Companies with experience of such Contracts are invited to submit their names with particulars of similar work to the undersigned by not later than MONDAY, 29th FEBRUARY, 1960.

Tender documents will be forwarded to Contractors nominated by the Council.

PHILIP J. WALTERS,
Town Clerk.

Guildhall,
Wrexham.
9th February, 1960.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.

TENDERS are invited for the CONVERSION INTO TWO FLATS of the County-owned Police House, at Weir-street, Todmorden. Plans and specifications are now available for inspection at the office of the Divisional Architect, Flint-street, Huddersfield.

Application for specification and Tender documents should be made to the Divisional Architect, Flint-street, Huddersfield, not later than 1st March, 1960.

The contract will be governed by the R.I.B.A. Form of Agreement as adapted for use of Local Authorities, where quantities do not form part of the contract.

Sealed Tenders must be addressed to me, the undersigned, and received at Room 46, County Hall, Wakefield, not later than 12 NOON on FRIDAY, 11th MARCH, 1960.

BERNARD KENYON,
Clerk of the County Council.

COUNTY BOROUGH OF SUNDERLAND.

FIRM PRICE TENDERS are invited for the ERECTION OF THE SUNDERLAND TECHNICAL COLLEGE, South Johnson-street site, comprising 6 STOREY MAIN BLOCK with 3 STOREY LINK UNIT, 3 STOREY EAST BLOCK, SINGLE STOREY HEAVY LABORATORY BLOCK, 2 STOREY LECTURE THEATRE and SINGLE STOREY RADIO-ACTIVE TECHNIQUES BLOCK together with EXTERNAL WORKS.

Bills of Quantities and Form of Tender are obtainable from the Borough Architect, Grange House, Stockton-road, Sunderland, on payment of £2 2s. deposit, refundable on receipt of a bona fide Tender.

Cheques payable to "Sunderland Corporation."

Sealed Tenders, to be returned in the envelope provided, must be received at my office, Town Hall, Sunderland, not later than 12th APRIL, 1960.

G. S. McINTIRE,
Town Clerk.

SURREY COUNTY COUNCIL.

TENDERS FOR PROPOSED EXTENSION TO MITCHAM, WESTERN-ROAD COUNTY SECONDARY BOYS' AND GIRLS' SCHOOLS.

The work consists of the ERECTION IN PERMANENT CONSTRUCTION of a TWO-STOREY EXTENSION to provide Light Crafts Room, Needlework Room and Housecraft Room on the ground floor, and Light Crafts Room, Metalwork Room and Woodwork Room on the first floor.

Contractors wishing to tender should apply to the County Architect, County Hall, Kingston-upon-Thames, by 1st MARCH, 1960.

BOROUGH OF SCARBOROUGH.

ERECTION OF 24 FLATS—FOXTON'S FARM, SCALBY-ROAD.

FIXED PRICE TENDERS are invited for the above. Bills of Quantities, Conditions of Contract and Form of Tender may be obtained from and drawings seen on application to the undersigned. Applications are to be accompanied by a deposit of £2 2s. 0d. which is returnable on receipt of a bona fide tender.

Sealed Tenders in the envelope provided to be delivered to the undersigned to arrive by 9 a.m. on MONDAY, 14th MARCH, 1960.

The Corporation does not bind itself to accept the lowest or any tender. Contractors tendering do so at their own expense.

V. FORSHAW,
Borough and Water Engineer.

Town Hall,
Scarborough.

COUNTY BOROUGH OF EASTBOURNE.

TO BUILDING CONTRACTORS.

ERECTION OF WORKSHOP BLOCK AND TWO-STOREY CLASSROOM, DRAWING OFFICE AND LABORATORY BLOCK.

Contractors desirous of TENDERING for the above-mentioned work which represents the first stage of new buildings for the Eastbourne College of Further Education are invited to apply to the Town Clerk, Town Hall, Eastbourne, not later than 4th MARCH, 1960.

Applications should include details of work of a comparable scale and type carried out in recent years together with an assurance that the applicant has the necessary resources to undertake the work. The structure of the two-storey block will be of reinforced concrete and that of the Workshop Block structural steelwork. Further details, if required, may be obtained from the Architects, Messrs. Gollins, Melvin, Ward and Partners, 15 Manchester-square, London, W.1.

From the names submitted, the Corporation may select a panel of contractors who will be supplied with bills of quantities and invited to submit tenders by mid-May, 1960.

F. H. BUSBY,
Town Clerk.

Town Hall,
Eastbourne.
17th February, 1960.

CONSTRUCTION OF BUILDING FOR CENTRAL BANK OF CEYLON.

The Central Bank of Ceylon proposes to ERECT A MULTI-STOREY BUILDING of approximately 285,000 square feet in area at the premises site 34 and 36 Queen-street, Fort, Colombo 1, Ceylon.

2. The building is to consist of the following:—
(a) Basement.
(b) Vaults.
(c) Ground Floor.
(d) Mezzanine Floor.
(e) Three multi-storey tower blocks of nine storeys each over Mezzanine Floor level.

3. The structure is reinforced concrete with a system of post tensioned prestressed "Preflex" beams in all tower blocks. The construction of the basement floors, since the water table level is at (—17 ft. 0 in.) at site, requires a highly specialised form of "tanking" and reinforcement.

4. Applications for Tender documents will only be considered from *bona fide* firms of Engineers and Contractors, who will undertake to complete construction of the building within a period of two years from the date of commencement of works (approximately June, 1960). Applications must be supported by satisfactory evidence of the following requirements:—
(1) Adequate machinery and plant necessary for constructing this type of building.
(2) Adequate staff of building Engineers with recognised qualifications who will be required as resident site engineers.
(3) Financial capacity covered by a suitable banker's guarantee.

Preference will be given to those who can adduce adequate proof of previous experience in a similar type of multi-storey works inclusive of this type of Basement and Vault construction.

5. Tender documents, including Bills of Quantities, will be issued to applicants selected by the Monetary Board of the Central Bank. Applications must be addressed to the Secretary, Central Bank of Ceylon, P.O. Box 590, Colombo 1, and should reach him not later than the 25th March, 1960.

S. E. P. JANSZ,
Secretary,
Central Bank of Ceylon.

Colombo 1.
13th February, 1960.

BOROUGH OF UXBRIDGE.

EXTERNAL PAINTING CONTRACTS.

TENDERS are invited for the EXTERNAL PAINTING OF HOUSES in the following groups:—

Contract No. 434, 54 HOUSES, Hillingdon.

Contract No. 435, 70 HOUSES, Hillingdon.

Contract No. 436, 128 HOUSES, Harefield.

Contract No. 437, 50 HOUSES, Hillingdon.

Contract No. 438, 56 FLATS, Hillingdon.

Contract No. 439, 42 HOUSES, Uxbridge.

Contract No. 440, 64 HOUSES, Hillingdon.

Contract No. 441, 34 HOUSES, Hillingdon.

Specification, Bills of Quantities and Form of Tender may be obtained from:—Harold E. G. Stripp, A.M.I.C.E., Borough Engineer, Surveyor and Architect, 263 High-street, Uxbridge, Middlesex, on receipt of a deposit of £2 2s. 0d. to be returned on receipt of a bona fide Tender.

Tenders may be submitted for one or more contracts and must be returned in the envelope provided, endorsed "Tender for External Painting" bearing no other mark or indication of the sender.

Tenders must reach the undersigned not later than NOON on SATURDAY, 26th MARCH, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

E. RONALD WEST,
Town Clerk.

265 High-street,
Uxbridge.

CITY OF LIVERPOOL.

WATER DEPARTMENT.

VYRNWY AQUEDUCT.

TENDERS invited for PAINTING, COLOURING AND PAPERING various properties on the Vyrnwy Aqueduct.

Documents from Water Engineer, 55 Dale-street, Liverpool 2, or Resident Engineer, Llanforda Filter Beds, Oswestry, Salop.

Tenders returnable by 12 noon, 14th MARCH, 1960.

THOMAS ALKER,
Town Clerk.

(J.6055.)

COUNTY BOROUGH OF CROYDON.

TENDERS are invited for CONSTRUCTING THE SECOND STAGE OF THE JOHN RUSKIN SPORTS PAVILION, Oaks-road, Shirley.

Apply for Specification, etc., to the Chief Education Officer, Katharine-street, Croydon, with a deposit of £1 returnable on receipt of a bona fide tender.

Tenders in plain sealed envelopes, endorsed "John Ruskin Sports Pavilion," must be delivered to me by noon on TUESDAY, 22nd MARCH, 1960.

E. TABERNER,
Town Clerk.

BOROUGH OF MACCLESFIELD.

FACTORY AT HURDSFIELD.

TENDERS are invited for the DESIGN, SUPPLY AND ERECTION OF STEELWORK FOR A FACTORY of 20,000 F.S. production area.

Drawings, specifications and Forms of Tender may be obtained from the Borough Architect, 3 Jordangate, Macclesfield, on deposit of £2 2s.

Tenders to be submitted to the undersigned, in sealed envelope, endorsed "Tender for Factory Steelwork," not later than 12 NOON, 16th MARCH, 1960.

WALTER ISAAC,
Town Clerk.

Town Hall,
Macclesfield.

BOROUGH OF THORNABY-ON-TEES.

FLATLETS FOR OLD PEOPLE.

TENDERS are invited for the ERECTION OF A TWO-STOREY BLOCK COMPRISING 20 FLATLETS, WARDEN'S QUARTERS, COMMUNAL and ANCILLARY ROOMS.

Plans prepared by Ronald Cowan, Esq., F.R.I.B.A., Chartered Architect, of 20 Finkle-street, Stockton-on-Tees, may be inspected, together with Conditions of Contract, at his office during normal hours.

Contractors wishing to Tender should apply to the Town Clerk for Bills of Quantities and Form of Tender not later than TUESDAY, 2nd MARCH, 1960, enclosing a deposit of £2 2s. 0d. which will be refunded on receipt of a bona fide Tender not subsequently withdrawn.

When applying for Bills of Quantities contractors should submit particulars of schemes of equivalent size undertaken by them.

Tenders must be submitted, in the envelopes provided, to the undersigned, not later than the date indicated on the Form of Tender.

The Council is not bound to accept the lowest or any Tender.

A. STOCKWELL,
Town Clerk.

PEMBROKESHIRE COUNTY COUNCIL.

STANDING JOINT COMMITTEE.

PROPOSED NEW POLICE STATION, MILFORD HAVEN.

Recognised Building Contractors are invited to TENDER for the ERECTION OF A PROPOSED NEW POLICE STATION at Milford Haven.

The general construction will be traditional with load bearing walls, concrete roofs, etc., and comprises a four-cell Station, Inspector's Flat and Garage, etc.

Contractors will be required to give proof that they are in a position to provide labour and staff in order to carry out this contract in an expeditious and workmanlike manner.

Applicants wishing to Tender are asked to register their names with Lt.-Col. Walter Barrett, M.B.E., A.R.I.B.A., County Architect, County Offices, Haverfordwest, before WEDNESDAY, 2nd MARCH, 1960, when arrangements will be made to despatch all relevant documents.

Applications must be accompanied by a deposit of £2 2s. 0d. which will be returned on receipt of a bona fide Tender and all returnable documents.

The County Council do not bind themselves to accept the lowest or any Tender.

H. LOUIS UNDERWOOD,
Clerk of the County Council.

County Offices,
Haverfordwest.
19th February, 1960.

BOROUGH OF WIDNES.

EDUCATION COMMITTEE.

FIXED-PRICE TENDERS are invited for the ERECTION OF TWO SCIENCE LABORATORIES and ancillary accommodation, floor area 3,400 sq. ft., in a two-storey steel framed building at the Fairfield County Secondary School for Boys, Widnes.

Conditions of Contract and drawings may be inspected, and Bills of Quantities and Form of Tender obtained from the Borough Architect, Brendan House, Widnes-road, Widnes, on receipt of a returnable deposit of £2 2s.

Tenders to be received not later than 10 a.m. on MONDAY, 28th MARCH, 1960. The Council do not bind themselves to accept the lowest or any tender.

FRANK HOWARTH,
Town Clerk.

Town Hall,
Widnes.
February, 1960.

CITY OF NEW SARUM.

BISHOPDOWN ESTATE, SALISBURY.

TENDERS are invited for the CONSTRUCTION OF 40 HOUSES, 24 FLATS, 11 BUNGALOWS, together with outbuildings, pavings, drainage and all ancillary works at Bishopdown Estate, Salisbury.

Tenders are to be on a "Fixed Price" basis and on Bills of Quantities, which will be available on SATURDAY, 12th MARCH, 1960. Copies of the Bills of Quantities and Form of Tender can be obtained from the City Engineer, The Council House, Salisbury.

Tenders in plain sealed envelopes must be delivered to the undersigned not later than noon on FRIDAY, 8th APRIL, 1960.

GEO. RICHARDSON,
Town Clerk.

The Council House,
Bourne Hill,
Salisbury.

METROPOLITAN BOROUGH OF WANDSWORTH.

ROUPELL PARK HOUSING ESTATE, STREATHAM.

Contractors wishing to TENDER FOR ERECTION OF 49 FLATS AND MAISONETTES in two 7-storey blocks at Brixton Hill, should submit names to me by 16th MARCH, 1960, giving details of experience, plant and technical and supervisory staff available together with names of two technical and two financial referees. Bills of quantities will be issued to selected contractors in due course.

Drawings may be examined at office of Mr. Clifford Culpin, O.B.E., F.R.I.B.A., M.T.P.I., 39 Doughty-street, W.C.1.

J. NOEL MARTIN,
Town Clerk.

Municipal Buildings,
Wandsworth, S.W.18.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE.

The Cleansing Committee of the Corporation are prepared to receive TENDERS for the ERECTION OF A LADIES' PUBLIC CONVENIENCE at the junction of Morden-street and Percy-street, Newcastle-upon-Tyne. Plan, Specification and Form of Tender may be obtained on application in writing to the Architects, F. Austin Child and Donald Hall, 6 Archbold-terrace, Newcastle-upon-Tyne, where Conditions of Contract may be inspected.

Sealed Tenders must reach the undersigned not later than 10 a.m. on THURSDAY, the 10th MARCH, 1960. No Tender will be accepted unless received in a plain envelope bearing the words "Cleansing Committee—Tender for the Erection of a Ladies' Public Convenience." The envelope must not bear any name or marking indicating the sender. The Committee do not bind themselves to accept the lowest or any Tender.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle-upon-Tyne.
16th February, 1960.

COUNTY BOROUGH OF SOUTHPORT.

The Council invite TENDERS for the SUPPLY, DELIVERY AND FIXING OF CLOAKROOM FITTINGS at the New Shower and Changing Room Block, King George V School, Southport.

The Specification and Drawing may be obtained from the Borough Architect and Town Planning Officer's Department, Pavilion Buildings, 99/105 Lord-street, Southport, on payment of £1 1s. 0d., which sum will be refunded on receipt of a bona fide tender.

Tenders are to be delivered to the undersigned by 11th MARCH.

R. EDGAR PERRINS,
Town Clerk.

COUNTY BOROUGH OF SWANSEA.

BOROUGH ARCHITECT'S DEPARTMENT.

MYNYDDBACH COUNTY SECONDARY SCHOOL FOR GIRLS. SECOND PHASE BUILDINGS AT MYNYDDBACH, SWANSEA.

ELECTRICAL INSTALLATION.

Firms wishing to TENDER for the ELECTRICAL INSTALLATION AT THE ABOVE SCHOOL are invited to submit their application to the Borough Architect, Guildhall, Swansea, on or before SATURDAY, 12th MARCH, 1960.

Plans, Specification and Conditions of Contract can be obtained on application and deposit of five pounds. The documents will be sent only to those applicants who have had the necessary experience to carry out work of this nature and magnitude and the applicants are advised that they should give evidence of having previously carried out work of a similar character.

The deposit will be refunded after delivery of a bona fide Tender (not subsequently withdrawn) and the return of all documents.

No guarantee is given that the lowest or any other Tender will be accepted.

T. B. BOWEN,
Town Clerk.

Guildhall,
Swansea.
17th February, 1960.

DURHAM COUNTY COUNCIL.

TENDERS invited:—

Durham Girls' Grammar School—ADDITIONS AND ALTERATIONS; HEATING AND D.H.W. INSTALLATIONS; HARDWOOD BLOCK FLOORING.

Peterlee Shotton Hall New County Junior School—ERECTION.

Application for further details to County Architect, South-street, Durham, not later than 9th MARCH, 1960.

Supply of paints and painters' equipment, year commencing 1st May, 1960. Details from County Architect. Tenders due 16th MARCH, 1960.

J. K. HOPE,
Clerk of the County Council.

Shire Hall,
Durham.

COUNTY BOROUGH OF SOUTHEND-ON-SEA.

PROPOSED SPORTS PAVILION AND PUBLIC TOILETS, BLENHEIM PARK, LEIGH-ON-SEA.

TENDERS.

Contractors desiring to TENDER for this project are invited to submit their names to the Borough Architect, 30 Alexandra-street, Southend-on-Sea, not later than WEDNESDAY, 9th MARCH, 1960, accompanied by details of similar works previously undertaken and names of Architects from whom references may be obtained.

The Contract comprises the ERECTION OF A SINGLE STOREY SPORTS PAVILION including PUBLIC TOILETS of about 1,700 feet super of brick construction with pitched roof and works incidental thereto.

From such applications a selected list of tenderers will be made by the Committee and those selected will be notified and will be required to make a payment of a deposit of £2.

Upon receipt of this deposit, the Bills of Quantities and Form of Tender will be forwarded, and it is anticipated that these will be available at the end of MARCH, 1960. The deposit of £2 will be refunded on receipt of a bona fide Tender or the return of all loaned documents.

The Corporation do not bind themselves to accept the lowest or any Tender.

ARCHIBALD GLEN,
Town Clerk.

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A complete range . . . 3½T, 5E, 7E, 7S, 10S, 12S and 14S with choice of steel wheels or pneumatics. Folding Hydraulic Weigher and Drag Loader Shovel available for 7S, 10S, 12S and 14S models. Illustrated literature and prices on request

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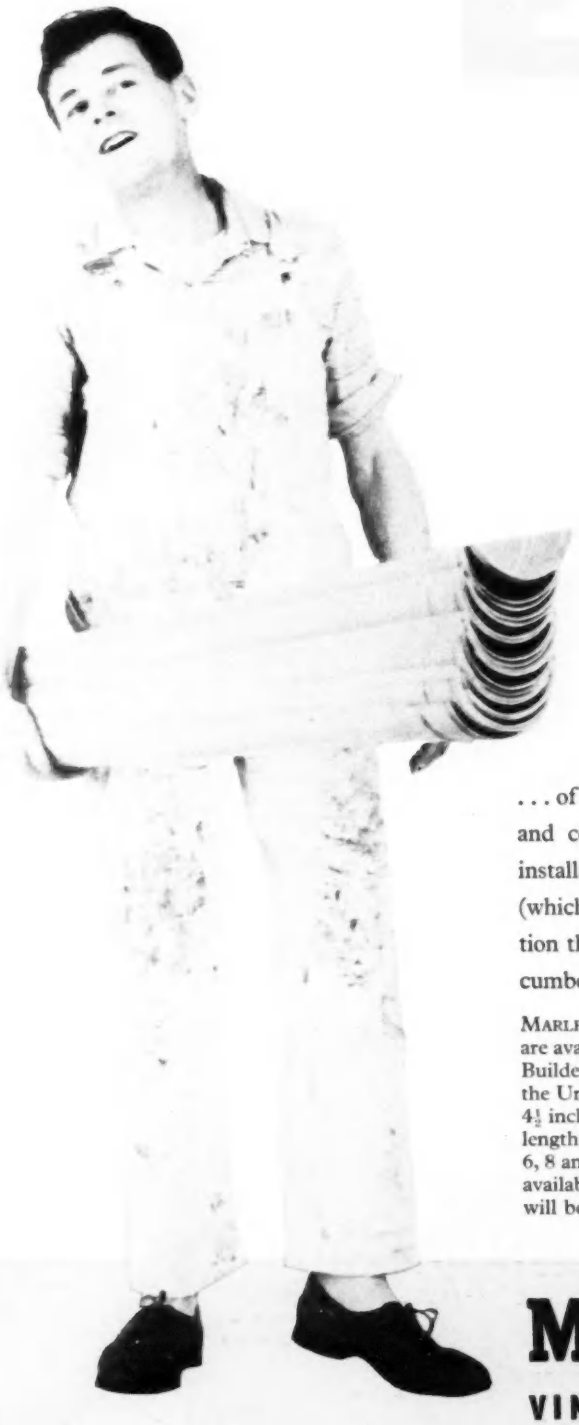

twenty six-foot lengths

. . . of Marley Vinyl Guttering are easy and comfortable to carry. Even before installation begins you've saved time (which is money!) and a lot of transportation that was necessary with the heavier, cumbersome materials of the old school

MARLEY Vinyl RAINWATER GOODS are available from Builders' Merchants throughout the United Kingdom. 4 inch, 4½ inch and 5 inch gutters in 6 foot lengths and 2½ inch downpipes in 6, 8 and 10 foot lengths are available now. 3 inch downpipes will be available shortly

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11/10C

Old Change House, London, EC4. Architect: Theo H. Birks F.R.I.B.A. Contractors: Bernard Sunley & Sons Ltd

new buildings
— new needs

New needs, new architecture, new buildings—and new ranges of Crittall windows. Crittall aluminium windows, designed to match the most forward- and upward-looking architectural concepts and ready to meet the toughest, down-to-earth practical service demands.

Thorough, painstaking researches on an international scale, the application of the most far-reaching advances in design and manufacturing techniques, and a new factory specialising in the production of aluminium windows and equipped with an anodising plant as up-to-the-minute as any in the world. All this, added to Crittall's already long experience in making metal windows of all kinds, will help to make the larger, higher, buildings of the future more efficient to live in and work in, less costly to maintain.

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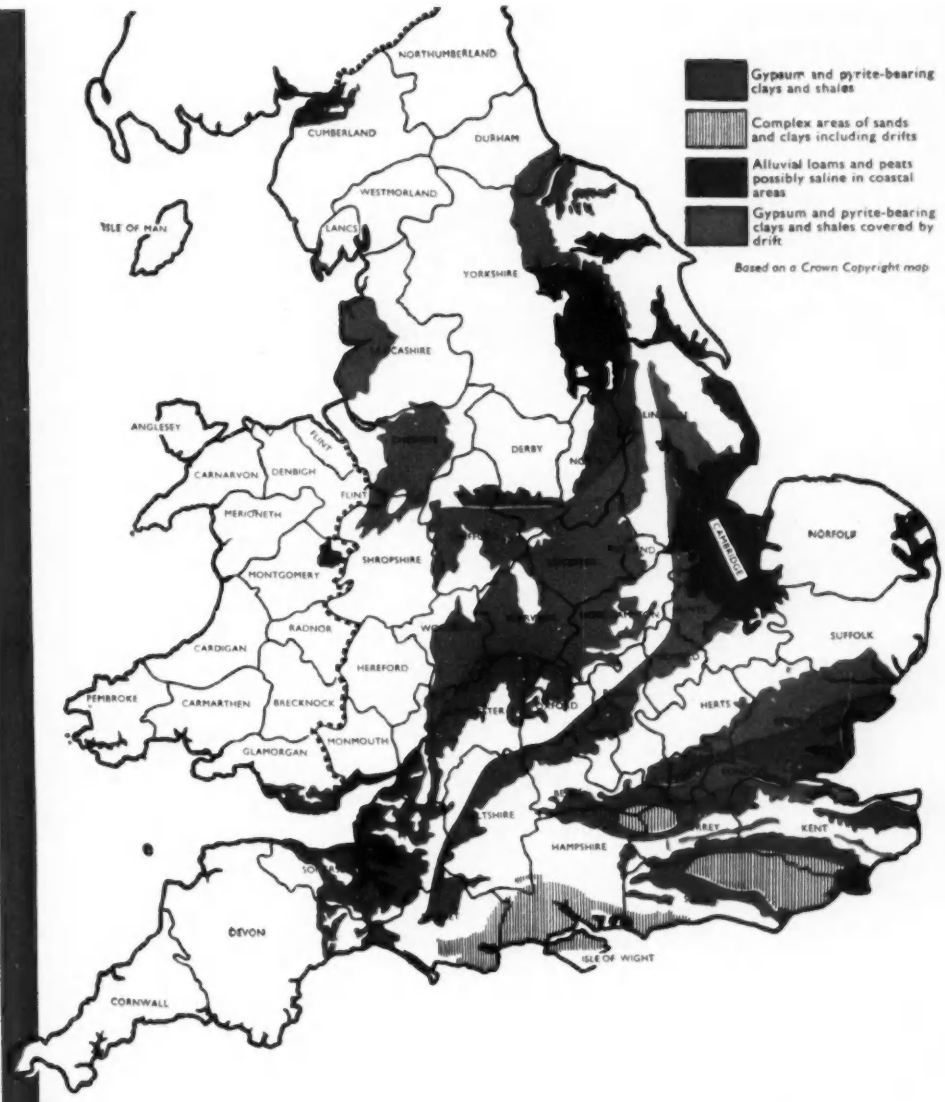

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Introducing the

Ascot De Luxe G512

the new water heater giving complete control

The New Ascot De Luxe type G512 represents the latest developments in water heater design and performance. Developed by Ascot for use as an instantaneous multipoint and single-point water heater, this Ascot De Luxe with its *complete* controls for gas and water is sure to be popular with the modern housewife. Here are some of its features:

Temperature Selector
A temperature selector controlling a temperature rise between 45°-100°F is incorporated, allowing the housewife to choose water at whatever heat she wants.

Gas and Water Controls
The Ascot De Luxe is fitted with a constant volume gas governor and a water governor. External controls include hot and cold taps and a rotary gas control. Gas and water cocks are an integral part of the heater lining.

Ease of Fixing and Maintenance
The De Luxe ensures easy fixing and maintenance. The outer case and top and bottom pans are quickly detachable, and all working parts are readily accessible. The stainless steel Ascot 'flat flame' burner needs little attention.

Versatility
The De Luxe is designed to operate as either a single point heater with a 9" spout, or as a small multipoint heater.

Performance
The De Luxe is 23¼" high, 10¼" wide and 8 5/16" deep and gives 30,000 B.t.u./hr. thermal output from an input of 40,000 B.t.u./hr. producing 0.5 g.p.m. raised 100°F, 0.625 g.p.m. raised 80°F, and pro rata. Pilot consumption is 250 B.t.u./hr.

For full details of the Ascot De Luxe type G512 write to
ASCOT GAS WATER HEATERS LIMITED, 255 NORTH CIRCULAR ROAD, NEASDEN, N.W.10

A Radiation Company

CITY AND COUNTY OF NEWCASTLE UPON TYNE.

The Corporation is prepared to receive TENDERS for: ERECTION OF GARAGES on Corporation Housing Estates as follows:

Montagu Estate	11	Garages
Slatyford-lane Estate	10	,,
Fawdon Estate	21	,,
Fairways Estate	17	,,
Longbenton Estate Unit 3	6	,,
Longbenton Estate Unit 4	7	,,
Benton Park Road Estate	7	,,
Kenton North Estate	12	,,
Provost Gardens off Atkinson-road	4	,,
TOTAL	95	,,

Contractors desirous of tendering for this work are requested to send their names in to the City Estate and Property Surveyor, Town Hall, Newcastle upon Tyne, 1, not later than 7th MARCH, 1960.

No tender will be received except in the official envelope provided for that purpose and such envelope shall not bear any mark indicating the sender.

Sealed tenders to be sent in on or before 10 a.m. on 1st APRIL, 1960.

The Corporation does not bind itself to accept the lowest or any tender.

By Order,
JOHN ATKINSON,
Town Clerk.

THE UNITED NEWCASTLE UPON TYNE HOSPITALS.

ROYAL VICTORIA INFIRMARY.

The Board of Governors proposes to carry out ALTERATIONS TO THE EXISTING DEPARTMENT OF DERMATOLOGY, to form an upgraded Ward Unit and Out-patient Department at the Royal Victoria Infirmary, Newcastle. The work to be carried out in two distinct stages. (Combined floor area: 11,100 ft. sup.)

Tender documents will be ready for issue to contractors in March, 1960, and it is anticipated that building operations could commence in April of this year. The project has been planned and will be carried out under the direction of H. E. M. Dobson, Dip.Arch., A.R.I.B.A., Staff Architect.

Contractors wishing to tender for the work are asked to notify the undersigned within 10 days of the appearance of the advertisement. A limited number of contractors may be selected and invited to tender. The lowest or any tender will not necessarily be accepted.

T. V. ROBERTS,
Secretary to the Board of Governors.
Royal Victoria Infirmary,
Newcastle upon Tyne, 1.

CITY OF CARDIFF.

CITY ARCHITECT'S DEPARTMENT.

PROPOSED RESCUE TRAINING SET.

Fixed Price TENDERS are invited for the CONSTRUCTION OF A RESCUE TRAINING SET at Caerau-lane, Ely, Cardiff.

Conditions of Contract, Drawings and Specification may be inspected at the City Architect's Department, 12 Park-place, Cardiff.

Specification, Bills of Quantities and Form of Tender may be obtained from the City Architect to whom application should be made, accompanied by a deposit of £2 2s. 0d. Cheques should be made payable to the Cardiff Corporation and crossed "Not negotiable and Co." The deposit will be refunded on receipt of a bona fide Tender or the return of the contract documents.

Tenders will not be considered unless enclosed in the envelope provided and endorsed "Tender for Rescue Training Set—Ely," addressed to the Town Clerk at the City Hall, Cardiff, and sent by Registered Post so as to be received not later than the 23rd MARCH, 1960.

The envelope must not bear the name of or any mark indicating the identity of the Tenderer.

Completed Bills of Quantities must not be submitted with the Tender but must be sent, completed in ink, so as to be in the hands of the City Architect within three days after written request following the opening of Tenders.

The Council does not bind itself to accept the lowest or any Tender.

S. TAPPER-JONES,
Town Clerk.

City Hall,
Cardiff.
February, 1960.

BOROUGH OF WATFORD.

OXHEY PARK.

TENDERS are invited for the ERECTION OF PUBLIC CONVENIENCES adjoining the High-street entrance of Oxhey Park.

Applications for documents, accompanied by a deposit of £2 2s. 0d., which will be returned on receipt of a bona fide tender not subsequently withdrawn, must be made to Mr. F. C. Sage, Borough Engineer and Surveyor, Town Hall, Watford, not later than 2 p.m. on FRIDAY, 4th MARCH, 1960.

Contract documents will be forwarded as soon as possible after that date.

GORDON H. HALL,
Town Clerk.

Town Hall,
Watford.

LEEDS REGIONAL HOSPITAL BOARD.

TO ENGINEERING CONTRACTORS.

FIXED PRICE TENDERS are invited for carrying out REORGANISATION OF THE LAUNDRY at Southmoor Hospital, Hemsworth.

Applications for Form of Tender and Specification and Drawings accompanied by a deposit of £2 2s. 0d. (which will be refunded on receipt of a bona fide tender and other contract documents) must be made to the Architect to the Board at the undermentioned address not later than 12 noon on WEDNESDAY, 9th MARCH, 1960. Cheques should be made payable to the "Leeds Regional Hospital Board" and crossed.

A copy of the drawings, Conditions of Tender and Conditions of Contract may be inspected at the office of the Architect to the Board, or at the office of Messrs. R. R. Jennings and Partners, Consulting Engineers, 39 Byrom-street, Deansgate, Manchester.

Sealed Tenders, in the endorsed envelope provided, must be delivered to the undersigned not later than 12 noon on THURSDAY, 7th APRIL, 1960.

The Board does not bind itself to accept the lowest or any tender.

WM. A. SHEE,
Secretary to the Board.

Park-parade,
Harrogate,
Yorks.

DRAYTON RURAL DISTRICT COUNCIL.

ERECTION OF 10 HOUSES AND BUNGALOWS AT CHESWARDINE.

The Council desires to obtain TENDERS for the ERECTION OF 4 THREE-BEDROOM HOUSES AND 6 ONE-BEDROOM BUNGALOWS, with the necessary site works, at Cheswardine, in accordance with Plans, Specification and Bills of Quantities, prepared by the Council's Architects and Quantity Surveyors.

Contractors wishing to tender are asked to submit their names and addresses, together with a deposit of £2 2s., to the undersigned not later than the 29th FEBRUARY. All necessary tender documents will then be sent to them. The deposit will be returned upon receipt of a bona fide Tender.

THOS. DUDLEY,
Clerk of the Council.

Council Offices,
Smithfield-road,
Market Drayton,
Shropshire.
17th February, 1960.

NORTHAMPTON RURAL DISTRICT COUNCIL.

1960 BUILDING PROGRAMME.

TENDERS are invited for the ERECTION of 52 BUNGALOWS, 12 HOUSES and 3 CLUB ROOMS on the following sites:—

Denton 11; Great Houghton 4; Little Houghton 17; Harpole 8; Kislingbury 12; Milton 10; Rothersthorpe 2.

Plans, Specifications and Bills of Quantities can be obtained from R. J. Miller, A.I.A.S., Architect, 1 Cheyne-walk, Northampton, upon payment of £3 3s. deposit, returnable on receipt of a bona fide Tender.

Tenders in plain, sealed envelopes marked "1960 Building Programme" are to be deposited with the undersigned by not later than 10 a.m. WEDNESDAY, 13th APRIL, 1960.

The Council do not bind themselves to accept the lowest or any Tender and reserve the right to accept any Tender for single or combination of sites.

CLIFFORD E. JONES,
Clerk of the Council.

Council Offices,
1 Cheyne-walk,
Northampton.
19th February, 1960.

COUNTY BOROUGH OF SWANSEA.

ARCHITECT'S DEPARTMENT.

AGED PEOPLE'S DWELLINGS, BRENIG-ROAD, PENLAN, SWANSEA.

ELECTRICAL INSTALLATION.

Firms wishing to TENDER for the ELECTRICAL INSTALLATIONS AT THE ABOVE DWELLINGS, are invited to submit their application to the Borough Architect, Guildhall, Swansea, on or before SATURDAY, 5th MARCH, 1960.

Plans, Specification and Conditions of Contract can be obtained on application and deposit of FIVE POUNDS. The documents will be sent only to those applicants who have had the necessary experience to carry out work of this nature and magnitude and the applicants are advised that they should give evidence of having previously carried out work of a similar character.

The deposit will be refunded after delivery of a bona fide Tender (not subsequently withdrawn) and the return of all documents.

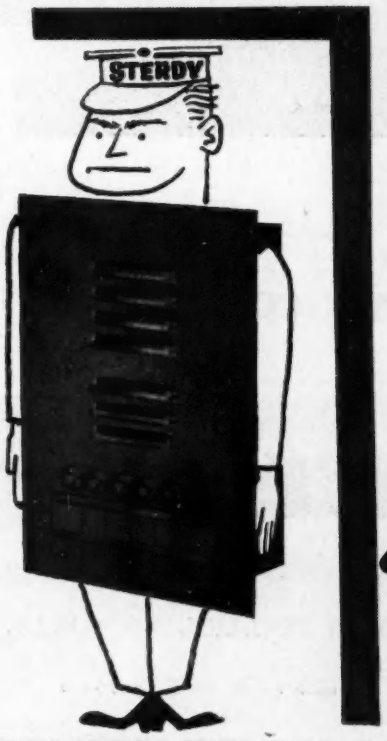
No guarantee is given that the lowest or any other Tender will be accepted.

T. B. BOWEN,
Town Clerk.

Guildhall,
Swansea.
19th February, 1960.

STERDY PORTER-

the sentry of the century



Occupiers of flats and converted houses live in peace when the Sterdy Porter is on guard. He never deserts his post of duty, never fails to answer a caller, never lets the wrong one through.

He consists of a front door speaker and individual flat telephone with occupier-operated front door releases. He enables residents to talk with all callers without leaving their fireside, admitting only those they wish to see. He's simple to install, foolproof in operation and dispenses entirely with the need for a hall porter. What could be simpler—or more essential ?

Sterdy Porter Systems are available for purchase outright or on generous rental terms. Write for full details today.

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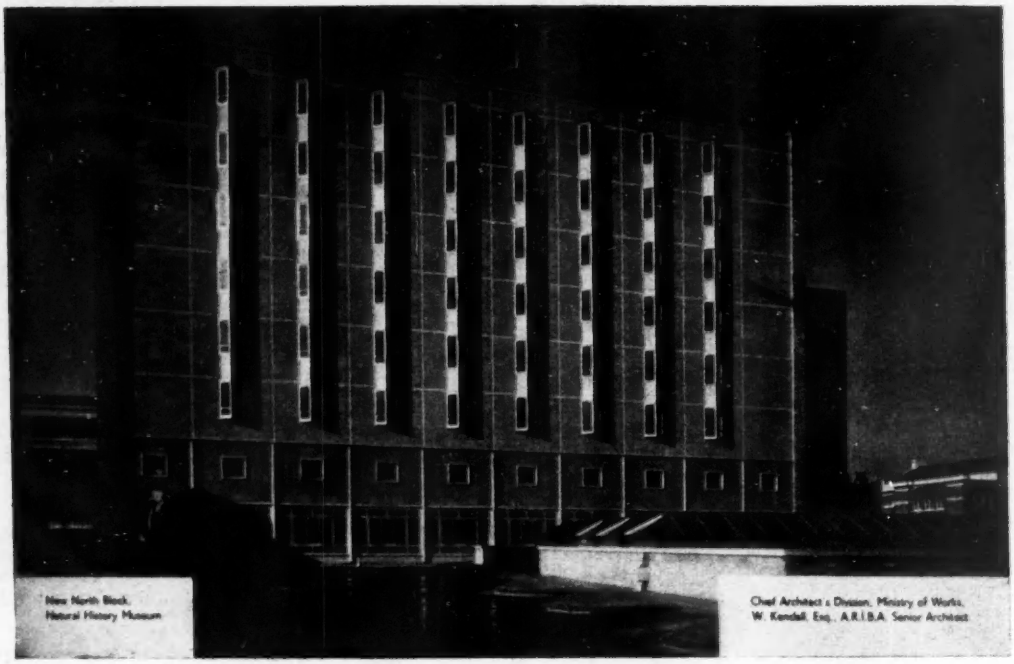
NEW NORTH BLOCK, NATURAL HISTORY MUSEUM, SOUTH KENSINGTON.

Illustrated in this issue.



MAIN CONTRACTORS

A. ROBERTS & CO. LTD.

BUILDING AND CIVIL ENGINEERING CONTRACTORS

79, ECCLESTON SQUARE, VICTORIA, S.W.1.

Telephone: VICTORIA 9161-6

BOROUGH OF STOURBRIDGE.

OLD PEOPLE'S DWELLINGS—PRESCOT-ROAD.

TENDERS are invited for the ERECTION OF 27 FLATLETS in a TWO STOREY BLOCK, together with Incidental Works.

The drawings may be inspected at the office, and Bills of Quantities and Documents obtained from the undersigned on receipt of a deposit of £2 2s.

Tenders, in plain sealed envelopes (by registered post), endorsed "Prescot Road Flatlets," to Town Clerk, Council House, Stourbridge, not later than NOON on 4th APRIL, 1960.

The Council does not bind itself to accept the lowest or any Tender. The acceptance of a Tender is subject to the approval of the Ministry of Housing and Local Government.

H. W. MORRIS,
B.Sc. (Eng.), A.M.I.C.E.,
Borough Engineer and Surveyor.

Council House,
Stourbridge.
19th February, 1960.

COUNTY BOROUGH OF SOUTHEND-ON-SEA.

PROPOSED CENTRAL BUS GARAGE, LONDON-ROAD, SOUTHEND-ON-SEA.
TO BUILDING CONTRACTORS.

TENDERS.

Contractors desiring to Tender for this project are invited to submit their names to the Borough Architect, 30 Alexandra-street, Southend-on-Sea, not later than THURSDAY, 10th MARCH, 1960, accompanied by details of similar works previously undertaken and names of Architects from whom references may be obtained.

The contract comprises the ERECTION OF A CLADDED STEEL FRAMED STRUCTURE mainly single storey but with a two-storey office section overall size about 240 ft. x 190 ft. x 25 ft. high to ridge, including reinforced concrete foundation work, concrete floor, partitioning, engineering services, decorations, adaptation of an existing building to be incorporated in new structure and demolition of remaining properties, external works, etc.

From such applications a selected list of Tenderers will be made by the Committee and those selected will be notified and will be required to make a payment of a deposit of £2 0s. 0d.

Upon receipt of this deposit, the Bills of Quantities and Form of Tender will be forwarded, and it is anticipated that these will be available in March, 1960. The deposit of £2 0s. 0d. will be refunded on receipt of a bona fide Tender or the return of all loaned documents.

The Corporation do not bind themselves to accept the lowest or any Tender.

ARCHIBALD GLEN,
Town Clerk.

HORSHAM RURAL DISTRICT COUNCIL.

HOUSING SCHEME—BILLINGSHURST.

The Council propose to invite TENDERS from a list of selected Contractors for the ERECTION OF 29 FLATS at Billingshurst intended primarily for old people and contractors wishing to be considered for inclusion on the list are invited to send their names to me with particulars of similar work carried out by them by not later than 5th MARCH, 1960. No obligation will rest with the Council in the preparation of the list of selected contractors.

A. W. LAIDMAN,
Clerk of the Council.

Comewell House,
North-street,
Horsham,
Sussex.
22nd February, 1960.

CITY OF CARDIFF.

CITY ARCHITECT'S DEPARTMENT.

TEACHER TRAINING COLLEGE, CYNCOED, CARDIFF.

SITE CLEARANCE, PLAYING FIELDS AND SITE LAYOUT.

FIXED PRICE TENDERS are invited for the CARRYING OUT OF SITE CLEARANCE, PLAYING FIELDS AND SITE LAYOUT for the proposed Teacher Training College at Cyncoed, Cardiff.

The area of the site is approximately 32 acres of which 28.5 acres are woodland and the remainder grassland.

The works comprise the clearance of woodland, stripping top soil, major levelling for playing fields and building site, land drainage, respreading top soil, seeding and turfing playing fields and lawns. The construction of a 440 yard cinder running track, pits, run-ups, etc., for field events, twelve tennis courts perimeter fencing and hedging.

Conditions of Contract, Drawings and Specification may be inspected at the City Architect's Department, 12 Park-place, Cardiff.

Specification, Drawings and Form of Tender may be obtained from the City Architect, to whom application should be made, accompanied by a deposit of £2 2s. Cheques should be made payable to the Cardiff Corporation and crossed "Not negotiable and Co." The deposit will be refunded on receipt of a bona fide Tender or the return of the contract documents.

Tenders will not be considered unless enclosed in the envelope provided and endorsed "Tender for Teacher Training College, Cyncoed—Site Clearance," addressed to the Town Clerk at the City Hall, Cardiff, and sent by REGISTERED POST so as to be received not later than the 23rd MARCH, 1960.

The envelope must not bear the name of or any mark indicating the identity of the Tenderer.

The Concil does not bind itself to accept the lowest or any Tender.

S. TAPPER-JONES,
Town Clerk.

City Hall,
Cardiff.
February, 1960.

BOROUGH OF BEDFORD.

76 FLATS,
CENTRAL AREA REDEVELOPMENT.

CONTRACT 51.

TENDERS are invited for the above buildings in two blocks of 5 storeys in height to be ERECTED in the new Central Redevelopment Area, adjacent to Priory-street.

The period for tendering will be three weeks.

Applications for tender documents should be made to F. W. Dawkes, Esq., Borough Engineer and Surveyor, Newnham House, Horne-lane, Bedford, accompanied by a deposit of £5 5s. (which is returnable on receipt of a bona fide tender not subsequently withdrawn) not later than FRIDAY, 11th MARCH, 1960.

G. F. SIMMONDS,
Town Clerk.

Town Hall,
Bedford.

ST. ALBANS RURAL DISTRICT COUNCIL.

72 DWELLINGS, ALEXANDER-ROAD, LONDON COLNEY.

The above-named Council propose to obtain TENDERS from selected firms for the ERECTION OF 72 DWELLINGS on their Alexander-road, London Colney Housing Site.

Firms desirous of being considered are invited to submit full particulars of their experience and details of similar work carried out to the Council's Surveyor, 25 Upper Lattimore-road, St. Albans, not later than the 7th MARCH, 1960.

COUNTY BOROUGH OF ROTHERHAM.

HOUSING COMMITTEE.

The Corporation invites applications from Building Contractors who wish to TENDER for the ERECTION OF 134 HOUSES AND 32 GARAGES on the Kimberworth Park Estate.

The buildings are of traditional construction and the Tender will not allow for any fluctuation in the rates for labour or materials during the course of the Contract.

Forms of Tender and Bills of Quantities will oe forwarded as soon as possible after receipt of application, which should be made to the Borough Engineer, Municipal Offices, Rotherham, not later than 10 a.m. THURSDAY, 3rd MARCH, 1960, accompanied by a deposit of five guineas, which will be refunded on receipt of a bona fide Tender.

The Corporation does not bind itself to accept the lowest or any Tender.

JOHN S. WALL,
Town Clerk.

Municipal Offices,
Rotherham.
22nd February, 1960.

BOROUGH OF ACCRINGTON.

ERECTION OF A NEW COVERED MARKET.

The Council propose to invite FIXED-PRICE TENDERS for the ERECTION OF A NEW COVERED MARKET consisting of the following buildings.

1. Two reinforced concrete shell roof structures each being 139 ft. x 60 ft. with basement storage below.
2. Single-storey structure containing shopping arcades, food shops, public conveniences, etc., and being approximately 144 ft. x 43 ft.
3. Ancillary buildings, service roads, etc.

Drawings prepared under the direction of Bernard Hartley, B.Sc. (Eng.), A.M.I.C.E., A.M.I.Mun.E., Borough Engineer and Surveyor, can be seen at his offices, 44 Union-street, Accrington, between 9 a.m. and 5.30 p.m.

It is the Council's intention to select a number of contractors who will be furnished with Bills of Quantities, etc., during MAY, 1960, and asked to submit fixed-price tenders by a date to be decided later.

Contractors who wish to tender are therefore requested to submit their names for consideration to the Borough Engineer and Surveyor before the 26th MARCH, 1960, and should list full particulars of any similar work already carried out, especially buildings constructed with reinforced concrete shell roofs.

JACK GARTSIDE, LL.B.,
Town Clerk.

Town Hall,
Accrington.

CITY OF OXFORD.

BLACKBIRD LEYS SECONDARY MODERN SCHOOL.

The City Council intends to build the first phase of the above school at Blackbird Leys Estate. This will take the form of a two-form entry school for 300 pupils.

The construction generally is traditional and comprises four separate blocks, three being single storey and one four storey with a reinforced concrete frame.

This will be a Fixed Price Contract and fluctuations will not be taken into account in respect of labour and materials.

Contractors wishing to Tender should submit their names not later than 4th MARCH, 1960, to the City Architect and Planning Officer, Town Hall, Oxford.

HARRY PLOWMAN,
Town Clerk

Town Hall,
Oxford.

BOROUGH OF CHELTENHAM.

HOUSING COMMITTEE.

TENDERS are invited for the EXTERNAL PAINTING OF 1,192 DWELLINGS made up at follows:

GROUP 1. HESTERS WAY, 298 FLATS.
GROUP 2. HESTERS WAY, 100 HOUSES.
GROUP 3. HESTERS WAY, 172 FLATS AND 50 HOUSES.
GROUP 4. ROWANFIELD ESTATE, 190 HOUSES.
GROUP 5. LYNWORTH ESTATE, 50 HOUSES.
GROUP 6. ST. PAUL'S ESTATE, 215 HOUSES.
GROUP 7. PATES - AVENUE/ALSONTE-LANE, 78 HOUSES AND 15 FLATS.
GROUP 8. ST. MARK'S ESTATE/HESTERS WAY, 24 HOUSES.

Applications to be made at once to the undersigned for specifications and Forms of Tender, accompanied by a deposit of two guineas (made payable to the Cheltenham Corporation) which will be refunded on receipt of a bona fide tender not subsequently withdrawn.

Tenders may be submitted for any or all of the above-mentioned Groups. The Council does not bind itself to accept the lowest or any tender, nor to place the whole of the work with a single contractor.

G. GOULD MARSLAND,
Borough Engineer.

P.O. Box No. 12,
Municipal Offices,
Cheltenham.
22.2.60.

SEVENOAKS RURAL DISTRICT COUNCIL.

CROUCH HOUSE-LANE, EDENBRIDGE.

FIRM-PRICE TENDERS are invited for the ERECTION OF THREE PAIRS OF THREE-BEDROOM HOUSES, ONE BLOCK OF FOUR THREE-BEDROOM HOUSES AND TWO BLOCKS OF FOUR AGEING PERSONS FLATS on the above site.

Form of Tender, Specification and Bills of Quantities may be obtained from the Council's Engineer & Surveyor on payment of a deposit of Two Guineas. The deposit will be refunded after the delivery of a bona fide tender, not subsequently withdrawn.

Tenders must be returned to the undersigned by 10 a.m. on TUESDAY, 29th MARCH, 1960.

The Drawings and Conditions of Contract may be inspected at the office of the Engineer and Surveyor during normal office hours.

The Council does not bind itself to accept the lowest or any tender.

B. H. EDWARDS,
Clerk to the Council.

"Inglewood,"
Oak Hill-road,
Sevenoaks,
Kent.
22nd February, 1960.

PUBLIC APPOINTMENTS

PADDINGTON BOROUGH COUNCIL.

Require CLERK OF WORKS (Maintenance and Repairs) (A.P.T. II) (£795 to £910 p.a.). Candidates should be able to inspect premises, draw up specifications, measure work, supervise repairs and examine accounts under a schedule of works contract. Written applications stating age, qualifications, experience and names and addresses of three referees should reach the undersigned (quoting A.457) by 7th MARCH, 1960.

W. H. BENTLEY,
Town Clerk.

Town Hall,
Paddington Green,
W.2.

MARLEY MULTIPLE GARAGES
IN PRECAST CONCRETE

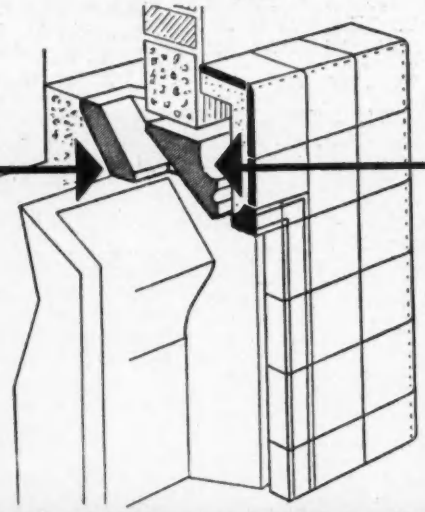
Of spacious dimensions and good appearance. This fire-proof and rot-proof garage is available in four types—high front, high back, back-to-back and stepped with Marley up-and-over or traditional timber doors. Low initial cost. Virtually maintenance free. *Marley will supply and deliver only or supply and erect. Installed for hundreds of Local Authorities.* Site work can also be undertaken, if required. We shall be pleased to submit quotations on request. Marley make the best garages.

MARLEY CONCRETE LIMITED Dept. 78 Peasmarsh, Guildford, Surrey (Head Office) Guildford 62986. Shurdington, Nr. Cheltenham, Glos. Shurdington 334/5. Hatchpond Road, Waterloo, Poole, Dorset. Broadstone 626. London Showrooms: 251 Tottenham Court Road, W.1.

THE "OTTY" FIREBACK HOOD (PAT Nº 722619) AND OUTLET (REGD DESIGN Nº 888215)

In Best Quality FIREBRICK Materials

Section of a Fireplace showing the **"OTTY"** Fireback Hood and **"OTTY"** Outlet *assembled together.*



Predetermines entrance to flue.
Restricts throat to correct size.
Correctly splayed throat aperture
Smoke passes unimpeded into flue.
Cuts down excess air change.
Retains heat in room.
Impedes down draughts.

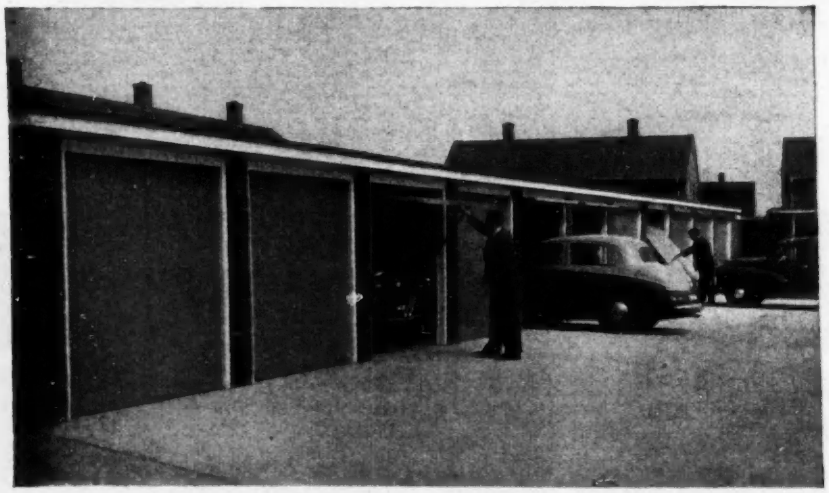
Seals off fireback to lintel.
Resists heat to back of surround.
Shelf remains cool.
Eliminates smoke pocket.
Avoids loss of heat up flue.
Greater efficiency.
Economy in fuel.

Write for fully illustrated list.

Stocked by leading merchants everywhere.

BOWENS (REFRACTORIES) LTD. Clattershall Fireclay & Brick Works - Stourbridge Telephone: BRIERLEY HILL 78101 & 78102

ELLARD SLIDING DOOR GEAR



OVERDOR
GARAGE DOOR GEAR

Is LOW in PRICE and extremely simple to erect.

Requires MINIMUM of SPACE, fixing TIME and MAINTENANCE.

Is opened and closed with EASE and SPEED.

Leaves completely CLEAR threshold and side walls.

Is suitable for PRIVATE garages or COUNCIL lock-ups, either singly or in multiples.

Please write for further details of this product and our many other types of SLIDING DOOR GEAR.

ELLARD SLIDING DOOR GEARS LTD.

(DESK 9), WORKS ROAD, LETCHWORTH, HERTS. Telephone 613/4

COUNTY BOROUGH OF ROCHDALE.

BOROUGH SURVEYOR'S DEPARTMENT.

Applicants are invited for the post of ASSISTANT ARCHITECT in the Housing Section on Special Grade (£785-£1,070 p.a.). The successful applicant if fully qualified will be offered, subject to conditions, housing accommodation.

Canvassing will disqualify. Relationship to any member or senior official of the Council must be disclosed. Appointment subject to medical examination.

Applications, stating age, qualifications, experience and names of two referees to Borough Surveyor, Town Hall, Rochdale, by 7th March.

K. B. MOORE,
Town Clerk.

BOROUGH OF TOTTENHAM.

BUILDING MANAGER. Established Post. Salary £1,250 p.a., rising to £1,405 p.a. Good managerial experience of Building Trade required including maintenance and new construction, estimating, costing of building works and incentive bonus schemes. Car allowance. Form and particulars from Borough Engineer, (B), Town Hall, Tottenham, N.15, to whom applications must be delivered not later than 18th MARCH, 1960.

AIREBOROUGH URBAN DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the position of ARCHITECTURAL ASSISTANT or BUILDING SURVEYOR in Grade A.P.T. II (£765-£880 per annum).

Candidates should be proficient draughtsmen and experienced in the preparation of Working Drawings and Details, Quantities, Site measurements, interim and final accounts.

The appointment will be (a) in accordance with the National Scheme of Conditions of Service; (b) terminable by one month's notice on either side, and (c) superannuable, subject to a satisfactory medical report.

Applications, stating age, qualifications experience, and the names of two referees, must be delivered to the undersigned not later than FRIDAY, the 11th MARCH, 1960.

RALPH H. HULME,
Clerk of the Council.

Council Offices,
Micklefield House,
Rawdon, Leeds.
19th February, 1960.

CITY OF BRADFORD.

CLERK OF WORKS.

Applications are invited for the appointment of CLERK OF WORKS (Post 172) in the Contract Housing Section of the City Engineer and Surveyor's Department at a salary on Grade A.P.T. I (£610-£765).

Candidates must have had experience as a clerk of works or general foreman in the construction of houses, and should hold the Higher National Certificate.

Application forms obtainable from the City Engineer and Surveyor, Town Hall, Bradford, 1, with three testimonials, must be received by the undersigned by 11th MARCH, 1960.

HENRY PATTEN,
Town Clerk.

Town Hall,
Bradford, 1.

EBBW VALE URBAN DISTRICT COUNCIL.

APPOINTMENT OF CHIEF ASSISTANT ARCHITECT
(Non-Designated Post), Grade A.P.T. IV
(£1,065-£1,220).

An ARCHITECT (Degree, Diploma or A.R.I.B.A.) is required to lead a small, but enthusiastic young group in the Architect's Department, working on the new Civic Centre in Ebbw Vale. The project includes Municipal Offices with Council Chamber and a covered swimming pool for immediate construction, with a large Public Hall to follow. Other interesting schemes include a small Public Hall, Community Centre and an extensive Housing programme.

The salary will be in accordance with Grade A.P.T. IV, the appointment being subject to three month's notice on either side, to the passing of a medical examination and is superannuable.

Alternative Saturday mornings are free and there are canteen facilities.

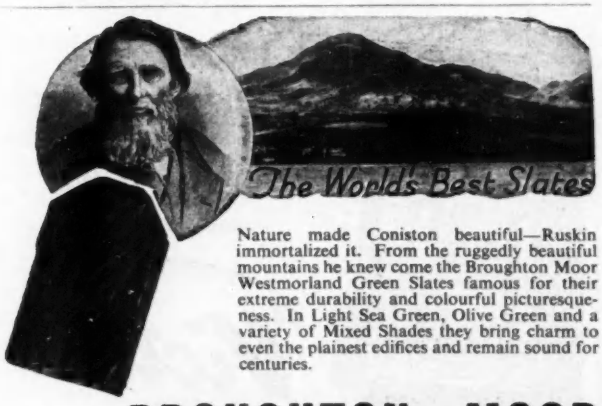
The Council will provide housing accommodation if required and consideration will be given to the payment of reasonable removal expenses.

Ebbw Vale is situate in close proximity to the beautiful Usk Valley and Brecon Beacons National Park.

Forms of application may be obtained from the undersigned and applications are to reach him by not later than WEDNESDAY, the 2nd day of MARCH, 1960.

HOWARD J. WILLIAMS,
Clerk of the Council.

Council Offices,
The Walk,
Ebbw Vale,
Mon.



Nature made Coniston beautiful—Ruskin immortalized it. From the ruggedly beautiful mountains he knew come the Broughton Moor Westmorland Green Slates famous for their extreme durability and colourful picturesqueness. In Light Sea Green, Olive Green and a variety of Mixed Shades they bring charm to even the plainest edifices and remain sound for centuries.

BROUGHTON MOOR

LIGHT SEA GREEN AND OLIVE GREEN SLATE

is eminently suitable for interior or exterior use where great durability and unique appearance are of paramount importance. Architects may specify its use for Facings, Foundation Stones, Paving and Flooring, Steps, Cills, Shop Fronts, Surrounds, Pilasters, Fireplaces, etc. Ask for these Technical Pamphlets:

1. Floorings.
2. Facings.
3. Coping.
4. Cills.
5. Riven Face Slabs.

● We will gladly send you our full range of samples with quotations.

IMMEDIATE DELIVERY

The BROUGHTON MOOR GREEN SLATE QUARRIES Ltd.

CONISTON · THE LAKE DISTRICT · LANCASHIRE

Telephone: Coniston 225/6

LEEDS REGIONAL HOSPITAL BOARD.

Applications are invited for the following appointments:—

(a) SENIOR ASSISTANT ARCHITECTS. Salary scale £1,050-£1,245 per annum. New entrants to the Service will commence at the minimum of the scale.

(b) ASSISTANT ARCHITECTS. Salary scale £730-£1,055 per annum.

(c) ASSISTANT QUANTITY SURVEYOR. Salary scale £730-£1,055 per annum.

The commencing salaries for posts (b) and (c) are dependent on relevant practical experience and may be at an incremental point above the minimum of the scale, provided that the additional increments given do not exceed the number of years by which the candidate's age exceeds 23.

(d) ARCHITECTURAL ASSISTANTS. Salary scale £545-£765 per annum.

(e) DRAUGHTSMAN (ARCHITECTURAL). Salary scale £425-£635 per annum.

The commencing salaries for posts (d) and (e) may be at an incremental point above the minimum of the scale relevant to each year of practical experience, provided that the additional increments given are not more than the number of years by which the officer's age exceeds 21 and the starting salary does not exceed £630.

All salary scales quoted are under review.

Candidates should possess the following qualifications:—

Appointments (a) and (b) Associate Members of the R.I.B.A.; (c) Associate Member of the R.I.C.S.; (d) Intermediate Examination of the R.I.B.A.; (e) suitable training including not less than three years' drawing office experience.

The establishment of the Board's Architectural Staff is to be increased to meet the substantial increase in the Hospital Building Programme and the above architectural posts will provide young architects with opportunities to gain experience in the design and erection of good quality buildings.

The Board's offices are in pleasant surroundings and an excellent canteen is available on the premises.

Applications, stating age, qualifications and experience, together with names and addresses of two referees to the Secretary, Park Parade, Harrogate, by 15th MARCH, 1960.

CITY OF BIRMINGHAM.

DEPUTY CITY ARCHITECT.

Applications are invited from suitably qualified Architects for the appointment of DEPUTY CITY ARCHITECT, at a salary of £2,870 per annum, rising by annual increments of £100 to a maximum of £3,370 per annum.

A memorandum giving details about the scope of the appointment and general conditions may be obtained from the undersigned.

Applications must be received by me not later than 18th MARCH, 1960.

A. G. SHEPPARD FIDLER,
City Architect.

Civic Centre,
Birmingham, 1.

BOROUGH OF ROWLEY REGIS.

BUILDING DEPARTMENT.

Applications are invited for:—

(a) ARCHITECTURAL ASSISTANT, A.P.T. I (£610-£765).

(b) ASSISTANT QUANTITY SURVEYOR, A.P.T. II (£765-£880).

For (a) applicants should be experienced in housing and other architectural works normally undertaken by a Local Authority.

(b) Applicants must be experienced in preparing estimates, bills of quantities, checking interim and final accounts.

Applications, stating age, qualifications and experience, together with two recent testimonials, should be sent to the undersigned not later than FRIDAY, the 11th MARCH, 1960.

JOHN HILTON,
Town Clerk.

Municipal Buildings,
Old Hill,
Staffordshire.
February, 1960.

THE ROYAL INFIRMARY OF EDINBURGH AND ASSOCIATED HOSPITALS.

ARCHITECTURAL ASSISTANT.

Applications are invited from candidates holding the intermediate certificate of the R.I.B.A. and having practical experience. Varied and interesting work. Starting salary £525 to £605 per annum according to age and experience. Apply in writing to Personnel Officer, Royal Infirmary, Lauriston-place, Edinburgh 3.

WILTSHIRE COUNTY COUNCIL.

Applications invited for appointment of QUANTITY SURVEYING ASSISTANT in County Architect's Department, salary scale £765-£880. Applicants should be suitably qualified, capable of estimating, carrying out valuations and checking final accounts. Applications, giving 3 referees, to the Clerk of the Council, County Hall, Trowbridge, by 5th MARCH, 1960.

AIR MINISTRY Requires in

CENTRAL LONDON and PROVINCES, LANDS TECHNICAL ASSISTANTS with general experience in Estate Agents and Surveyor's Office, some posts require Field Survey experience. Salary scale for Grade III in LONDON from £585 to £900 p.a. Somewhat lower in PROVINCES. Commencing salary dependent on age, qualifications and experience. Also vacancies in lower grade IV on scale from £455 to £772 p.a. No upper age limit for Central London vacancies. 5-day week. 18 working days' paid leave a year initially plus Bank Holidays. Promotion prospects up to Grade I (maximum salary in London £1,300). Pension prospects. Applicants, who must be natural born British subjects, should write to Air Ministry, W.G.d, Lacon House, Theobalds-road, London, W.C.1, or to any Employment Exchange (quoting Kings Cross 3750), giving age, details of training and qualifications. Candidates selected will normally be interviewed in London and certain expenses reimbursed.

BRITISH RAILWAYS.

ASSISTANT QUANTITY SURVEYOR Required in Architect's Office at King's Cross Station. Applicants should have had experience of Taking-off, measuring variations and preparing estimates and specifications for architectural work on Standard Method of Measurement.

Candidates must have passed the Intermediate examination of the R.I.C.S. Salary according to age, qualifications and experience. Five-day week, concessionary rail travel, permanency and membership of Superannuation Scheme to suitable applicant after probationary period. Apply in writing, giving age, experience and qualifications, to The Architect, Chief Civil Engineer, British Railways, King's Cross Station, London, N.1.

COUNTY BOROUGH OF SOUTHPORT.

Applications are invited for the appointment of a BUILDING INSPECTOR (A.P.T. Grade I, £610-£765 per annum) in the Borough Architect and Town Planning Officer's Department.

Applicants must have a sound knowledge of building construction, and preference will be given to holders of the Building Surveyor's to Local Authorities Certificate of the Royal Institute of British Architects or the Building Inspector's Certificate of the Institution of Municipal Engineers.

Application forms may be obtained from the Borough Architect and Town Planning Officer, 99-105 Lord-street. Closing date for the receipt of applications is SATURDAY, 12th MARCH, 1960.

WEDNESFIELD URBAN DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the position of CHIEF ASSISTANT ARCHITECT at a salary in accordance with A.P.T. IV (£1,065 to £1,220).

Candidates must be qualified and have had considerable experience in the appointment for which they make application.

The district is developing rapidly and offers exceptional experience. The National Joint Council Conditions of Service will apply and the successful candidate will be required to contribute to a Superannuation Scheme and also undergo a medical examination.

Housing accommodation will be provided, if necessary, and reasonable removal expenses will be paid.

Applications stating age, qualifications, experience, with the names of two referees must be received by the undersigned by not later than 4th MARCH, 1960.

J. HENWOOD JONES,
Clerk of the Council.

Council Offices,
Alfred Squire-road,
Wednesfield,
Staffs.

AIR MINISTRY Works

Designs Branch requires in LONDON and Provinces, ARCHITECTURAL ASSISTANTS with adequate training and drawing office experience. O.N.C. (Building) an advantage. Work includes site layouts, sketch plans, working drawings and details for variety of technical and domestic buildings in permanent and semi-permanent construction. Financial assistance and time off given for recognised courses of study. Promotion and pension prospects. Five-day week with 18 working days' leave per year initially. Overseas tours for which special allowances granted. Salary in LONDON ranges from £680 (age 25) to £900 p.a. for men; from £673 to £868 p.a. for women; somewhat lower in PROVINCES. Commencing salary dependent on age, qualifications and experience. Applicants, who must be natural born British subjects, should write to Air Ministry, W.G.C., Lacon House, Theobalds-road, London, W.C.1, or to any Employment Exchange (quoting Order No. Kings Cross 3744), giving age, details of training, qualifications, full particulars of former posts held and copies of any testimonials. Candidates selected will normally be interviewed in London and certain expenses reimbursed.

46 and 48 HYDE VALE,
BLACKHEATH

(Illustrated in this issue)

Architect: David Bush, B/Arch., A.R.I.B.A.

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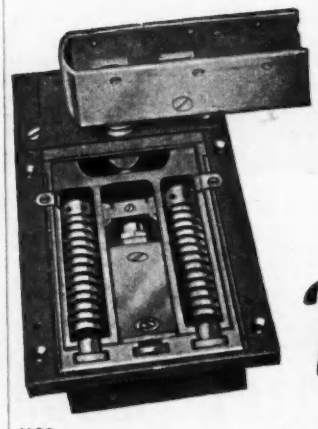

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BIRMINGHAM REGIONAL HOSPITAL BOARD.

ARCHITECT'S DEPARTMENT.

(a) ASSISTANT ARCHITECTS (ref. Arch. 1).

Salary scale £730-£1,055 per annum. Starting salary according to age and experience. Applicants must be registered architects having passed the requisite examinations. Experience of hospital planning and construction an advantage. Sound knowledge of architectural design, working drawings, surveying and specifications essential.

(b) ARCHITECTURAL ASSISTANTS (ref. Arch. 2).

Salary £545 (at age 21 years or over) —£765 per annum. Point of entry according to experience. Inter-R.I.B.A. essential.

(c) ASSISTANT QUANTITY SURVEYORS (ref. Arch. 3).

Salary scale £730-£1,055 per annum. Starting salary according to age and experience. Final R.I.C.S. and experience in taking off and preparing bills of quantities and settlement of final accounts essential.

(d) SURVEYING ASSISTANT (BUILDING) (ref. Arch. 4).

Salary scale £545-£765. To assist in survey of existing hospital buildings and preparation of record plans. Inter. R.I.C.S (Buildings Division) essential. Must be a neat draughtsman with experience in measurement and plotting of surveys to all scales.

All posts superannuable. Five-day week. Written applications, quoting reference of post desired and naming two referees to Secretary, RHB, 10 Augustus-road, Birmingham, 15, by 7th MARCH, 1960.

LONDON COUNTY COUNCIL.

CLERKS OF WORKS Required on multi-storey housing schemes to act in first instance as assistants. Commencing salaries between £815 and £890 with scope for advancement to senior posts for men of ability. Applicants should possess sound knowledge of building construction, have served full trade apprenticeship and had experience in supervisory capacity on multi-storey housing contracts. Experience in reinforced concrete work an advantage.

Application form returnable by 5th MARCH from Architect, EK/29/60, County Hall, S.E.1. (283.)

BOROUGH OF STOURBRIDGE.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointment:—

ASSISTANT BUILDING INSPECTOR, salary in accordance with Grade A.P.T. I (£610-£765). Applicants should have a good knowledge of Building Construction and Building Byelaws. Previous experience in this section of a Municipal Engineer's Department is desirable but not essential, and preference will be given to persons holding the Building Inspector's Certificate of the Institution of Municipal Engineers or an equivalent qualification.

Applications, stating age, qualifications and experience, together with the names and addresses of three persons to whom reference can be made, to be sent to the Borough Engineer and Surveyor, The Council House, Stourbridge, not later than MONDAY, 7th MARCH, 1960.

A. P. DRURY,
Town Clerk.

The Council House,
Stourbridge.
12th February, 1960.

COUNTY BOROUGH OF SOUTHEND-ON-SEA.

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following posts:—

ASSISTANT ARCHITECT, Special Classes Scale (£785 x £40(6) x £45-£1,070).

TECHNICAL ASSISTANT (ARCHITECTURAL), Grade A.P.T. II (£765 x £25(1) x £30(3)-£880).

ASSISTANT QUANTITY SURVEYOR, Special Classes Scale (£785 x £40(6) x £45-£1,070).

STUDENT HEATING ENGINEER (General Division salary range £210-£655).

A flat is available for a suitable candidate.

Candidates must be suitably qualified and experienced.

The appointments will be subject to the provisions of the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service so far as adopted by the Council. Medical examination.

Applications, stating age, qualifications and experience, with the names of two referees, should be submitted to the Borough Architect, 30 Alexandra-street, Southend-on-Sea, forthwith.

Canvassing will disqualify. Any candidate who is related to member or officer of the Council is required to disclose the fact.

ARCHIBALD GLEN,
Town Clerk.

LINDSEY (LINCOLNSHIRE) COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

Owing to re-organisation of the Department to cope with large and interesting programme of work, the following vacancies occur:—

(a) ARCHITECTURAL ASSISTANTS Grade A.P.T. 3, £880-£1,065.

(b) ENGINEERING ASSISTANT. Grade A.P.T. 3, £880-£1,065.

(c) QUANTITY SURVEYING ASSISTANT, Grade A.P.T. 2, £765-£880.

(d) QUANTITY SURVEYING ASSISTANT, Grade A.P.T. 1, £610-£765 or Miscellaneous 3, £525-£590.

(e) AREA CLERK OF WORKS, Grade A.P.T. 2, £765-£880.

Applicants for (a) experienced with a sound knowledge of construction to complete the middle section of a team; (b) Qualified by experience or graduate I.H.V.E. and able to prepare designs for heating schemes; (c) preferably Intermediate R.I.C.S. and able to abstract and take off for smaller jobs; (d) grade offered according to experience but applicants must be able to abstract; (e) to take charge of area centred on Skegness and be responsible for supervision of major schemes and many minor schemes.

Commencing salary within the grade dependent upon experience. N.J.C. Conditions of Service. Canvassing will disqualify. Candidates must disclose in writing whether to their knowledge they are related to any Member or Senior Officer of the Council.

Applications, giving age, qualifications, experience, present post and salary, and the names of two persons to whom reference can be made, to be sent to the County Architect, County Offices, Lincoln, not later than 10th MARCH, 1960.

BUILDINGS SURVEYORS.

Architect's Department, L.C.C., has vacancies in Building Regulation Division and District Surveyors' Service for work in connection with applications under London Building Acts and By-laws. District Surveyors' offices are located in Metropolitan Boroughs and work involves negotiations with developers and supervision of works in progress.

Up to £1,135 (under review) commencing according to qualifications and experience.

Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council, EK/111/59, County Hall, S.E.1. (2628.)

HAYES AND HARLINGTON U.D.C.

Applications are invited for:

(a) ASSISTANT ARCHITECT. Salary within Special Grade, i.e., £785-£1,070 p.a. (b) ARCHITECTURAL ASSISTANTS (Two). Salary within Grade A.P.T. II, i.e., £765-£880 p.a., plus London "Weighting" in all cases, 21-25 years, £20 p.a., 26 years and over £30 p.a. Preference will be given to candidates for (a) who have passed the examination for Associateship of the R.I.B.A. and who must be capable of preparing sketch designs, full working drawings, specifications, supervision of building contracts, etc. Applicants for (b) should have passed the Intermediate Examination of the R.I.B.A. and must have good general architectural experience. Five-day week. Housing accommodation if required will be made available for (a) and for one of the appointments (b). Further particulars and conditions of service and form of application obtainable from the undersigned, which when completed must be returned by 7th MARCH, 1960.

GEORGE HOOPER,
Clerk and Solicitor.

Town Hall,
Hayes,
Middlesex.

COUNTY BOROUGH OF GRIMSBY.

BOROUGH SURVEYOR AND ARCHITECT'S DEPARTMENT.

APPOINTMENT OF ARCHITECTS.

Applications are invited for the following appointments on the permanent staff of the Department:—

(a) SENIOR ARCHITECT, Grade A.P.T. V, Salary £1,220-£1,375 per annum.

(b) A GENERAL ARCHITECT, Special Grade, Salary £785-£1,070 per annum.

Applicants for appointment (a) should have passed the Final Examination of the R.I.B.A., and for appointment (b) should have passed the Intermediate Examination.

The appointments will be subject to the Conditions of Service of the National Joint Council, terminable by one month's notice on either side, and to the provisions of the Local Government Superannuation Acts. The successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications, present and past appointments, and details of experience, together with the names and addresses of two referees, must be forwarded to the undersigned not later than first post on MONDAY, 14th MARCH, 1960.

J. V. OLDFIELD,
L.R.I.B.A., F.R.I.C.S.,
Borough Surveyor and Architect.
Municipal Offices,
Grimsby.
February, 1960.

BOROUGH OF EDMONTON.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT (Temporary). Grade A.P.T. IV, £1,065-£1,220, plus London Weighting. Candidates should have passed the final examination of the Royal Institute of British Architects or equivalent examination, recognised by the Architects Registration Council and should be experienced in the construction of multi-storey flats and public buildings.

Applications on forms obtainable from the Town Clerk, Town Hall, Edmonton, N.9, must be delivered by the 12th MARCH, 1960.

CITY OF WORCESTER.

PROPOSED GIRLS' GRAMMAR SCHOOL AND PROPOSED TEACHERS' TRAINING COLLEGE.

APPOINTMENT OF CLERKS OF WORKS.

Applications are invited for these two temporary appointments from men who have had considerable experience in the building trade. It is expected that work on both projects will effectively start during March, 1960, and will take approximately two years in each case to complete.

The appointments are within A.P.T. Grade II (Salary £765-£880).

The successful candidates will be required to undergo medical examination.

Applications, stating age, qualifications and experience, and giving the names of two referees, are to be addressed to the City Engineer and Surveyor, 22 Bridge-street, Worcester, so as to reach him by 2nd MARCH.

BERTRAM WEBSTER,
Town Clerk.

Guildhall,
Worcester.

QUANTITY SURVEYING

ASSISTANTS, GRADE III. Required by AIR MINISTRY in the PROVINCES. Duties include abstracting and billing, site measurement and preparation of estimates. Candidates must hold O.N.C. (Building or Builders Quantities) or equivalent, and have good experience under Quantity Surveyor or Building Contractor. Knowledge W.D. Schedule an advantage. Financial assistance and time off given for recognised courses of study. Promotion and pension prospects. 5-day week with 18 days' leave a year initially. Overseas tours for which special allowances granted.

Salary ranges from £680 (at age 26) to £850. Commencing salary dependent upon age, qualifications and experience. Applicants, who must be natural born British subjects, should write stating age, qualifications and previous appointments including type of work done, to Manager (P.E.2), Professional and Executive Register, Ministry of Labour, Atlantic House, Farringdon-street, London, E.C.4. No original testimonials should be sent. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only applicants selected for interview will be advised.

CIVIL SERVICE.

QUANTITY SURVEYORS AND ASSISTANT QUANTITY SURVEYORS Required by several Government Departments. Posts in London, provinces and occasionally overseas. London salaries for suitably qualified and experienced men over 25 years of age, range from £830 to £1,300 per annum. QUANTITY SURVEYING ASSISTANTS and others having some experience in Quantity Surveying at salaries ranging from £387 10s. to £900 per annum also required. Prospects of promotion and pensionable status.

Write for particulars of vacancies in each department and forms quoting J.Q.S. to Ministry of Labour, Technical and Scientific Register, 26 King-street, London, S.W.1.

COUNTY BOROUGH OF STOCKPORT.

BOROUGH ARCHITECT'S DEPARTMENT.

Vacancies for:—

1. ARCHITECTS, A.P.T. IV (£1,065-£1,220). Candidates must be members of the R.I.B.A.

2. ASSISTANT ARCHITECTS, Special Grade, £785-£1,070 or A.P.T. III (£880-£1,065) and A.P.T. I or II (£610-£880) depending on qualifications.

Commencing salaries according to age and experience. Large programme of modern buildings—design ability more important than Local Government experience, which is not essential.

Full particulars (age, experience, two referees) to Borough Architect, Town Hall, Stockport, by 9th MARCH, 1960.

The Corporation have a scheme for advancing, in approved cases, loans for house purchase up to 100 per cent.

Posts pensionable, subject to medical examination. Canvassing disqualifies. Applicants must disclose whether related to any member or senior officer of Council.

BOROUGH OF SOLIHULL.

APPOINTMENT OF ASSISTANT ARCHITECTS.

Following a review of the establishment of the Architect's Section of the Borough Surveyor's Department, applications are now invited from architects having suitable experience for appointment as ASSISTANT ARCHITECTS, at a salary in accordance with A.P.T. Grade IV (£1,065 per annum rising by annual increments of £50 and £55 to a maximum of £1,220 per annum).

Solihull has a population of approximately 90,000 and is still expanding rapidly. It is seeking County Borough status and is an Excepted District under the Education Acts. It has approximately £260,000 of education building under construction at the present time. The 1960-61 programme includes work of approximately £380,000 in value and the future programme includes new primary and secondary schools, nursery schools, extensions and adaptations, and a considerable number of minor capital works.

In suitable cases housing accommodation will be provided as soon as possible and half removal expenses paid.

The appointment is subject to the provisions of the Local Government Superannuation Acts, to the National Scheme of Conditions of Service and to one month's notice on either side.

Applications, giving full particulars as to present and past appointments, experience and qualifications held, should be submitted to the Borough Surveyor, 90 Station-road, Solihull, so as to reach him not later than 15th MARCH, 1960.

W. MAURICE MELL,
Town Clerk.

The Council House,
Solihull,
Warwickshire.
19th February, 1960.

BOROUGH OF ENFIELD.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the post of ARCHITECTURAL ASSISTANT, Grade A.P.T. I (£610-£765 per annum, plus a London Weighting Allowance of £10-£30 per annum according to age).

Applicants must have had experience in the preparation of plans, specifications, etc., including the maintenance of public buildings.

Saturday mornings are normally free of duty.

Application forms obtainable from H. D. Peake, M.Sc.(Eng.), M.I.C.E., Borough Engineer and Surveyor, 7 Little Park Gardens, Enfield, Middlesex, returnable to the undersigned.

CYRIL E. C. R. PLATTEN,
Town Clerk.

Public Offices,
Enfield,
Middlesex.

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STRUCTURAL ENGINEERS.

Various vacancies for ENGINEERS in Architect's Department, L.C.C. Up to £1,135 (under review) and with good prospects.

(a) STRUCTURAL ENGINEERING DIVISION. Extensive programme includes multi-storey flats, schools, offices, warehouses and other buildings.

(b) STRUCTURAL ENGINEERING DIVISION. To deal with applications in respect of special structures under Part IV of the London Building Act (A) Act, 1939, and the constructional by-laws. Interesting work involving consideration of unconventional forms of construction.

(c) DISTRICT SURVEYOR'S SERVICE. Work mainly outside involving negotiations with Architects, Engineers and Surveyors and supervision of works in progress.

Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council, EK/112/59, County Hall, S.E.1. (2629.)

COUNTY BOROUGH OF SOUTHAMPTON.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments:—

(i) ASSISTANT QUANTITY SURVEYOR, salary within the Special Scale £785-£1,070. Applicants must be chartered quantity surveyors, preferably with experience in municipal housing including multi-storey flats and shopping centres.

(ii) ASSISTANT ARCHITECT, Special Scale, £785-£1,070. Applicants must have passed Parts I and II of the R.I.B.A. final examination and have had experience in housing design and construction and estate layout, preferably with a municipal authority.

(iii) ARCHITECTURAL ASSISTANT, A.P.T. Grade II, £765-£880. Applicants are required to have passed the intermediate R.I.B.A. examination or its equivalent at one of the recognised schools of architecture, and preferably have had experience in local government housing.

The appointments are subject to N.J.C conditions of service.

Consideration will be given, if necessary, to the provision of housing accommodation.

Apply on application forms obtainable from the Borough Engineer and Surveyor, Civic Centre, Southampton, by MONDAY, 7th MARCH, 1960.

BIRMINGHAM TAME AND REA DISTRICT DRAINAGE BOARD.

ENGINEER'S STAFF—ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT on the staff of the Engineer to the Board, Rookery Park, Erdington, Birmingham, 24. The post is subject to one month's notice on either side, and the passing of a medical examination, the provisions of the Local Government Superannuation Acts and the undermentioned terms of employment. There is a possibility of housing being made available. Previous local authority experience is not necessary.

Permanent post at a commencing salary within A.P.T. Grade IV (£1,065 x £55 x £50 (2) — £1,220). Intermediate R.I.B.A. examination diploma as a minimum qualification and applicants must be capable architectural draughtsmen with a sound knowledge of building construction. Ability to prepare working drawings is essential. Some knowledge of specifications and bills of quantities is desirable.

Applications, accompanied by the names and addresses of two referees, giving particulars of age, qualifications and experience, should reach the undersigned not later than MONDAY, 14th MARCH, 1960.

ARTHUR J. WRIGHT,
Clerk to the Board.

Clerk's Office,
Lombard House,
Great Charles-street,
Birmingham, 3.
19th February, 1960.

CORBY DEVELOPMENT CORPORATION.

ASSISTANT ARCHITECTS.

There are vacancies on the staff of the Chief Architect for ASSISTANT ARCHITECTS.

The appointments will be made within A.P.T. Grade III (£880-£1,065) or IV (£1,065-£1,220). The grade and the commencing salary within the grade will depend upon qualifications and experience.

Candidates must be qualified A.R.I.B.A. or must have passed the final examination of the R.I.B.A. or equivalent examination recognised by the Architects Registration Council.

Appointments are subject to Superannuation under the Local Government Superannuation Scheme.

Housing is available. Removal expenses paid.

Applications stating age, education, training, qualifications, experience appointments held and salaries, together with the names of two referees much reach the undersigned by MONDAY, 7th MARCH, 1960.

R. F. BROOKS GRUNDY,
General Manager.

Spencer House,
Corby,
Northants.

HAMPSHIRE COUNTY COUNCIL.

ASSISTANT ARCHITECT, A.P.T. Grade IV (£1,065-£1,220), required for pensionable post in office of the County Architect. Candidates must have passed the final examination of the R.I.B.A. and have had considerable experience, preferably in the office of a Local Authority. Assistance with removal and other expenses in approved cases. Five-day week. Canteen facilities.

Application forms (send s.a.e.) returnable by 1st MARCH, from Clerk of the County Council, The Castle, Winchester.

ARCHITECTS AND BUILDING SURVEYORS.

Vacancies in Architect's Department, London County Council, for ARCHITECTS or BUILDING SURVEYORS experienced in surveying existing buildings, preparing sketch schemes, working drawings and specifications and supervising works in progress, for the complete internal replanning and modernisation of the older blocks of Council flats (jobs up to £50,000).

Applicants should have initiative, a real interest in this type of work and the ability to act on their own judgement since the maximum opportunity will be afforded for each to carry his own job through from survey to completion. Salaries ranging from £700-£1,135 (under review). Promotion by merit.

Application form from Hubert Bennett, F.R.I.B.A., the Architect to the Council, County Hall, S.E.1, quoting Ref. AR/EK/25/60. (210.)

CWMBRAN DEVELOPMENT CORPORATION.

APPOINTMENT OF ASSISTANT ARCHITECTS, A.P.T. III/IV

Applications are invited for the above superannuable posts in my Department in the Salary Range £880-£1,220 with a commencing salary according to Qualifications and experience.

Candidates should be Associates of the R.I.B.A. with suitable office experience and should have had good experience in house design, construction and layout, experience in shop design would be an advantage.

Housing accommodation will be made available to the successful applicants if needed.

Applications stating age, experience, details of present and former employment (together with applicable salaries) and the names and addresses of two referees must reach the undersigned by first post on MONDAY, 7th MARCH, 1960.

J. C. P. WEST, A.R.I.B.A., M.T.P.I.,
Chief Architect.

Victoria-street,
Cwmbran, Mon.

COUNTY BOROUGH OF WEST HAM

BOROUGH ARCHITECT AND PLANNING OFFICER'S DEPARTMENT

Applications invited for the following posts:

(a) GROUP ARCHITECT : APT IV
(b) DEPUTY GROUP ARCHITECT (2 posts) : Special Grade
(c) ASSISTANT PLANNING OFFICER : Special Grade
(d) ARCHITECTURAL ASSISTANT : APT II/Special Grade
(e) ARCHITECTURAL ASSISTANT : APT. I

(London Weighting in addition.)

Commencing salary according to qualifications and experience.

Application Form and Details from:

THOMAS E. NORTH, O.B.E., F.R.I.B.A.
70, West Ham Lane, Stratford, E.15,
returnable by **14th March, 1960.**

WARWICKSHIRE COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT

APPOINTMENT OF SENIOR QUANTITY SURVEYOR.

Applications are invited for the appointment of SENIOR QUANTITY SURVEYOR on Grade A-B (salary scale £1,290-£1,485).

Applicants must be members of the Royal Institution of Chartered Surveyors and have had experience in all branches of quantity surveying, including final accounts for large contracts.

The successful applicant will be in charge of a quantity surveying group which undertakes the preparation of estimates, bills of quantities and the settlement of accounts.

Forms of application and conditions applicable to the appointment can be obtained from E. Davies, A.R.I.B.A., A.M.T.P.I., Deputy County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
February, 1960.

BOROUGH OF HARROW.

Applications are invited for the following appointments in the Borough Engineer and Surveyor's Department:—

SENIOR ADMINISTRATIVE ASSISTANT. A.P.T. Grade IV (£1,065 to £1,220 per annum, plus London "Weighting").

Applicants should be suitably qualified and have wide experience in a similar Department.

Although not essential, it will be an advantage to have experience in central purchasing and stores control.

ADMINISTRATIVE ASSISTANT. A.P.T. Grade II (£765 to £880 per annum, plus London "Weighting").

Applicants should be suitably qualified and have experience of the administrative and clerical duties associated with the technical work of an engineering section.

CLERICAL ASSISTANT. Clerical II (£670 to £765 per annum, plus London "Weighting").

CLERICAL ASSISTANT. Clerical (£595 to £670 per annum, plus London "Weighting").

ASSISTANT ESTATES SURVEYOR. A.P.T. Grade IV (£1,065 to £1,220 per annum plus London "Weighting").

Applicants should hold the final qualification of an appropriate Professional Body and should have wide experience in Estate Management.

SURVEYING ASSISTANT. A.P.T. Grade II (£765 to £880 per annum, plus London "Weighting").

Applicants should be qualified at "intermediate" level and have experience in surveying and drawing.

CHIEF TECHNICAL ASSISTANT (MAINTENANCE). A.P.T. Grade IV (£1,065 to £1,220 per annum plus London "Weighting").

Applicants should be suitably qualified and experienced to organise both routine and long-term maintenance improvements and service installation works on approximately 5,000 dwellings, together with all municipal properties (except schools).

The person appointed will be responsible for works carried out by direct labour (under a Works Superintendent) and by Contract.

TECHNICAL ASSISTANT (BUILDING BYELAWS). A.P.T. Grade II (£765 to £880 per annum, plus London "Weighting").

Applicants should be qualified Building Inspectors.

The duties will be mainly in the office advising callers regarding the Council's Building Byelaws and other matters normally dealt with in a Building Inspector's section.

QUANTITY SURVEYING ASSISTANT. A.P.T. Grade II (£765 to £880 per annum, plus London "Weighting").

Applicants should have passed the Intermediate examination of the R.I.C.S. or I.Q.S.

Commencing salaries will be in accordance with qualifications and experience.

Contributions towards removal expenses will be considered.

The appointments will be subject to the Local Government Superannuation Acts; and to the National Joint Council's Scheme of Conditions of Service.

Application forms, obtainable from me, should be returned not later than SATURDAY, 5th MARCH, 1960.

D. H. PRITCHARD,
Town Clerk.

Town Clerk's Office,
Harrow Weald Lodge,
92 Uxbridge-road,
Harrow Weald,
Middx.

ASSISTANT ARCHITECTS

required with experience in design and construction of multi-storey housing, shops, garages, baths and wash houses depots, etc. Salary scales £785 to £1,070 per annum and £880 to £1,065 per annum plus "Weighting" of £30 (£10 less if under 26 years). Commencing salary according to qualifications and experience. 5-day week (Saturday morning rota one on in seven). Canteen available. Application forms obtainable from Borough Engineer and Surveyor, Poplar Town Hall, Bow-road, E.3, for return by first post MONDAY, 14th MARCH, 1960.

CITY OF CAMBRIDGE.

CITY ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments on the established staff of the City Engineer and Surveyor's Department.

1. SENIOR ASSISTANT ARCHITECT, A.P.T. IV (£1,065-£1,220).
2. ASSISTANT ARCHITECTS, Special Grade (£785-£1,070).
3. SENIOR ASSISTANT PLANNING, A.P.T. IV (£1,065-£1,220).
4. PLANNING ASSISTANT, A.P.T. II (£765-£880).
5. ASSISTANT BUILDING INSPECTORS, A.P.T. II (£765-£880).

For appointment (4) applicants must have had good general experience and have passed the intermediate examination leading to a recognised qualification. For the remaining appointments applicants must have a recognised qualification and in the case of appointments (1) and (3) preference will be given to those with at least one other appropriate qualification. Commencing salaries will be at a point within the appropriate grade according to experience and qualifications. Housing accommodation may be provided in certain circumstances.

Application forms and other particulars may be obtained from T. V. Burrows, A.M.I.C.E., M.I.Mun.E., City Engineer and Surveyor, and should be returned to him not later than the 19th MARCH, 1960.

ALAN H. I. SWIFT,
Town Clerk.

The Guildhall,
Cambridge.
February, 1960.

COUNTY BOROUGH OF BURY.

Applications invited for following permanent appointments:—

(a) SENIOR ASSISTANT ARCHITECT, A.P.T. IV (£1,065-£1,220).

(b) SENIOR ASSISTANT QUANTITY SURVEYOR, A.P.T. IV (£1,065-£1,220).

(c) ASSISTANT QUANTITY SURVEYOR, A.P.T. III (£880-£1,065) or Special Grade (£785-£1,070).

Commencing salaries according to qualifications and experience.

Applicants for appointments (a) and (b) should be experienced in dealing with contracts for large public works and be professionally qualified.

Applications stating position applied for, age, details of training, qualifications, present and previous appointments and experience, together with names and addresses of two referees, must reach me by 7th MARCH, 1960.

EDWARD S. SMITH,
Town Clerk.

Town Hall,
Bury.
9th February, 1960.

ESSEX EDUCATION COMMITTEE.

SOUTH-WEST ESSEX TECHNICAL COLLEGE AND SCHOOL OF ART, Forest-road, Walthamstow, E.17.

LABORATORY TECHNICIAN required (44-hour week) for the Building Science Laboratory. Duties include the maintenance of equipment, the upkeep of the laboratory and auxiliary duties in the department. Salary within scale £465-£590 per annum, plus London Allowance.

Apply by letter, stating age, qualifications and experience and giving names and addresses of two referees to the Clerk to the Governors at the College.

BOROUGH OF POOLE.

APPOINTMENT OF ASSISTANT ARCHITECT.

Special Grade (£785-£1,070).

Applications are invited for the above appointment. Candidates should have passed the appropriate professional examinations. Starting salary will depend on age and experience.

This is an appointment to deal with a rapidly expanding capital programme, and the work will be interesting and varied, but experience in educational projects would be an advantage.

Application forms from the Borough Engineer, Municipal Buildings, Poole, to be returned to me by FRIDAY, 11th MARCH, 1960.

J. G. HILLIER,
Town Clerk.

HAVANT AND WATERLOO U.D.C.

invite applications for a CLERK OF WORKS (Civil Engineering), Salary A.P.T. II (£765 to £880), and an ARCHITECTURAL ASSISTANT, Salary A.P.T. II (£765 to £880).

Applicants for each appointment must be suitably experienced and qualified to receive a salary within the A.P.T. grades.

Assistance will be given towards the cost of removal expenses, housing accommodation will be provided for married applicants requiring it, and consideration will be given to the payment of a car allowance.

Forms of application and further particulars may be obtained from the Engineer and Surveyor, 1 Park-road North, Havant, to whom applications should be sent not later than 9th MARCH, 1960.

ILFORD AND BARKING
GROUP HOSPITAL MANAGEMENT COMMITTEE.

GROUP WORKS DEPARTMENT.

ILFORD MATERNITY HOSPITAL, EASTERN-AVENUE, ILFORD, ESSEX (Adjacent to Newbury Park Station, Central London Line).

ASSISTANT ENGINEER required to assist Superintendent Engineer in the supervision of the Engineering and Building Services in this Group.

Applicants must have a first-class knowledge of Mechanical Engineering and Building Services, also drawing board experience. Knowledge of electrical installations would be an advantage.

Preference will be given to candidates who are studying engineering technology.

The post is subject to the terms and conditions of the appropriate Whitley Council. Salary £545 (1 x £20, 3 x £25, 1 x £30)-£670, plus London Weighting. (Salary under review).

Apply in writing, stating age, qualifications, details of experience, together with the names and addresses of three referees, to the Group Secretary, King George Hospital, Ilford, Essex, within 14 days of the appearance of this advertisement.

BOROUGH OF ROMFORD.

Applications are invited for a post of PRINCIPAL ASSISTANT ARCHITECT, within the salary range £1,250 to £1,405 per annum. Applicants must be fully qualified and must have at least three years' experience subsequent to qualification. Interesting and varied work available. In appropriate cases housing accommodation will be provided and removal expenses paid. "Essential User" car allowance, 7/-day week.

Full particulars and conditions can be obtained from the Town Clerk, Town Hall, Romford, to whom applications for the appointment are to be sent by the 11th MARCH.

BOROUGH OF WIDNES.

HOUSING DEPARTMENT.

HOUSING ASSISTANT (MALE).

Applications are invited from suitably qualified persons preferably having had experience in controlling building tradesmen on repairs and maintenance work. A limited amount of rent collection will be involved.

Salary grade Misc. VI (£715 x £20—£775). N.J.C. conditions; superannuation scheme; medical examination.

Applications, stating age, qualifications, experience, and quoting two referees, to Housing Manager, Town Hall, Widnes, by 1st MARCH, 1960.

FRANK HOWARTH,
Town Clerk.

Town Hall,
Widnes.

CITY OF PORTSMOUTH.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of ASSISTANT ARCHITECTS, A.P.T. Grade IV (£1,065-£1,220), commencing salary according to experience. Successful candidates will be engaged on new Civic Offices, Technical College, Schools, Swimming Baths, Multi-storey Flats, Old People's Homes, etc.

Applicants must be Associate members of the R.I.B.A.

The Council will consider the provision of housing accommodation at an economic rent in suitable cases.

Applications, giving full details of experience and the names and addresses of two referees must be delivered to the City Architect, 1 Western-parade, Portsmouth, not later than MONDAY, 14th MARCH, 1960.

Canvassing will disqualify.

V. BLANCHARD,
Town Clerk.

BOROUGH OF STRETFORD.

BUILDING INSPECTOR.

BUILDING INSPECTOR with several years' experience; must be familiar with control under building byelaws, Town and Country Planning Acts, Factory Acts, etc., and have thorough knowledge of building trades, methods of construction, etc.

Salary in accordance with Grades A.P.T. I/II of the N.J.C. Scales (£610 to £880); medical examination; one month's notice. Application forms from Borough Engineer, Town Hall, Stretford, returnable by 7th MARCH, 1960.

C. TREWAVAS,
Town Clerk.

Town Hall,
Stretford.
18th February, 1960.

COUNTY BOROUGH OF BLACKPOOL.

Applications (by 1st MARCH, 1960) are invited for the appointment of DEPUTY BOROUGH SURVEYOR (£1,778 to £2,001 per annum). Forms and further particulars obtainable from Borough Surveyor (Arthur Hamilton, B.Sc.), P.O. Box 17, Municipal Offices, Blackpool.

HOSPITAL MANAGEMENT COMMITTEE NO. 9: WAKEFIELD "A" GROUP.

BUILDING SUPERVISOR required for supervisory duties (under the direction of the Superintendent Engineer) in connection with building maintenance work of a group of ten hospitals and associated premises. Applicants must have served a full apprenticeship in the building trade followed by experience as a craftsman in an appropriate trade and have had some years' experience as a general foreman in the carrying out of building contracts. Possession of the Ordinary National Certificate or a comparable qualification is desirable. Salary £745 rising to £880 per annum with Whitley Council Conditions of Service. New entrants to the Hospital Service commence at minimum of scale.

Application forms from the Group Secretary, 113 Northgate, Wakefield.

MAINTENANCE SURVEYOR, A.P.T. II (£765/£880 plus London "Weighting").

Applications invited for permanent post from persons with knowledge and experience of local authority surveying work in building maintenance section. 38-hour 5-day week (Saturday morning rota). Canteen. Commencing salary in accordance with experience and qualifications. Application forms obtainable from Borough Engineer and Surveyor, Town Hall, Bow-road, E.3, for return by first post on MONDAY, 14th MARCH, 1960.

CORBY DEVELOPMENT CORPORATION.

SENIOR CLERK OF WORKS.

Applications are invited for one post of SENIOR CLERK OF WORKS in the Department of the Chief Architect at a salary within A.P.T. Grade III (£880-£1,065) of the Whitley Council scales for New Towns staff.

The successful candidate will be employed on the supervision of major building contracts in the New Town of Corby.

The appointment is subject to contributory superannuation under the Local Government scheme for which medical examination will be required.

Housing is available. Removal expenses paid.

Applications stating age, training, qualifications, experience, present and past appointments and salaries, together with the names of two referees must reach the undersigned by MONDAY, 7th MARCH, 1960.

R. F. BROOKS GRUNDY,
General Manager.

Spencer House,
Corby,
Northants.

CITY OF CANTERBURY.

Applications are invited from persons who have passed the Final Examination of the R.I.B.A. for the appointment of an ASSISTANT ARCHITECT. Special Scale (£785-£1,070). Commencing salary according to qualifications and experience.

Applicants should have had good general experience and be capable of preparing accurate working drawings.

Housing accommodation available if required.

Applications, together with the names of two referees, must reach the City Architect and Planning Officer, Mr. John L. Berbiers, F.R.I.B.A., A.M.T.P.I., not later than THURSDAY, 10th MARCH, 1960.

Canvassing will disqualify.

J. BOYLE,
Town Clerk.

Municipal Buildings,
Canterbury.

SALOP COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited from Chartered Quantity Surveyors for the appointment of PRINCIPAL ASSISTANT QUANTITY SURVEYOR. Salary Grade A.P.T. V (£1,220 rising by annual increments to £1,375 p.a.). N.J.C. Conditions of Service will apply. A disturbance allowance or weekly separation allowance may be paid to a married man taking up the appointment. Conditions of service and application form obtainable from Ralph Crowe, A.A.Dipl., A.R.I.B.A., A.M.T.P.I., County Architect, Column House, London-road, Shrewsbury. Closing date 15th MARCH, 1960.

OXFORD REGIONAL HOSPITAL BOARD.

CONTEMPORARY HOSPITAL BUILDINGS.

ARCHITECTS who wish to work (in association with W. J. Jobson, Regional Architect) on projects in this most interesting field of development are invited to apply for the following permanent posts:

SENIOR ASSISTANT ARCHITECT, £1,050 to £1,125 per annum;

ASSISTANT ARCHITECT, £730 to £1,055 per annum;

(Salaries are at present under review).

Previous hospital experience is not necessary. Further particulars may be obtained from the Secretary, 43 Banbury-road, Oxford, and applications, quoting two referees, should be received not later than 18th MARCH, 1960.

WESSEX REGIONAL HOSPITAL BOARD.

Applications are invited for the appointment of CLERK OF WORKS to supervise the construction of hospital building works in the Bournemouth and Dorchester areas. The rate of pay will depend on qualifications and experience and will be within the range of £11 5s. to 15 guineas per week.

Applicants must have a thorough knowledge of the building trade and practical experience in supervising the erection of buildings and adaptations, must be competent in checking levels, setting-out, measuring up and preparation of records and progress reports.

Applications stating age, qualifications and experience together with the names and addresses of at least two referees, preferably employers, should be sent to the Secretary, Wessex Regional Hospital Board, Highcroft, Romsey-road, Winchester, within 14 days of the appearance of this advertisement.

CRAWLEY DEVELOPMENT CORPORATION Require a CLERK OF WORKS capable of supervising large contracts for external painting of Corporation dwellings.

Membership of the Institute of Clerks of Works an advantage. Salary £926 per annum. Housing may be provided. Apply on forms from Chief Estates Officer (Vacancy), Broadfield, Crawley, Sussex, by 5th MARCH, 1960.

E. E. H. CAGE,
Chief Executive.

CRAWLEY DEVELOPMENT CORPORATION Require ASSISTANT IN ESTATES DEPARTMENT (Maintenance Section). Ordering, pricing and supervision of repairs and general maintenance works carried out by Contractors. Preference will be given to candidates studying for R.I.C.S. (Building) Examination. Salary £465-£765 per annum. Housing may be provided. Contributory Superannuation Scheme. Apply on forms from Chief Estates Officer (Vacancy), Broadfield, Crawley, Sussex, by 5th MARCH, 1960.

E. E. H. CAGE,
Chief Executive.

CITY OF SHEFFIELD.

APPOINTMENT OF SENIOR GROUP LEADER ARCHITECT (EDUCATION). Salary Scale: £1,215 x £60(2) x £55(2) to £1,445.

Applications are invited for the above mentioned appointment on the permanent staff of the City Architect, Mr. J. L. Womersley, F.R.I.B.A., Dist.T.P., M.T.P.I.

The post ranks next to the Chief Assistant Architect and the successful candidate will be required to deputise for him as the occasion demands on Education work, in addition to taking charge of a group responsible for the design and supervision to completion of major works on new schools and colleges.

Temporary housing accommodation available and reasonable removal expenses paid.

Applications stating age, education and training, qualifications, experience, present and past appointments (with dates and salaries) and the names and addresses of two persons to whom reference may be made, should reach the undersigned by WEDNESDAY, 9th MARCH, 1960.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield, 1.
18th February, 1960.

METROPOLITAN BOROUGH OF HAMPSTEAD

Require a temporary MAINTENANCE OFFICER in the Housing Architect's Department. Salary in A.P.T. Grades I/II (£610-£880 plus London Weighting). Candidates must have a sound knowledge of building construction, experience in the preparation of specifications for maintenance works and have passed an examination of an appropriate institute. No housing provided. Applications giving experience, previous appointments and names of two referees to the Town Clerk (B), Town Hall, Haverstock Hill, N.W.3, by 8th MARCH, 1960.

RURAL DISTRICT COUNCIL OF MARSHLAND. RURAL DISTRICT COUNCIL OF WISBECH.

ARCHITECT'S DEPARTMENT.

Applications are invited for the TEMPORARY APPOINTMENT OF ASSISTANT ARCHITECT. Special class scale, £785-£1,070.

Consideration will be given to provision of housing accommodation if required.

The appointment is on the temporary staff of the Architect. Applications, stating age, qualifications, and experience, together with the names of two referees, should be submitted to the Architect, Council Offices, Alexandra-road, Wisbech, Cambs., not later than 12th MARCH, 1960.

RONALD E. DIXON,
Clerk of the Councils.

Council Offices,
Alexandra-road,
Wisbech, Cambs.
20th February, 1960.

Amended Advertisement.

CITY OF LINCOLN.

ASSISTANT ARCHITECT.
Special Grade: £785-£1,070.

Applications are invited for the above appointment on the established staff of the City Architect, dealing with Schools, varied Architectural Works and New Housing. Commencing salary within the Grade according to qualifications and experience.

The appointment will be subject to the Local Authorities' Superannuation Act and the successful applicant will be required to pass a medical examination.

Housing accommodation may be available if required.

Applications giving full particulars together with the names of two persons to whom reference may be made should be submitted to Mr. R. R. Alexander, F.R.I.B.A., M.T.P.I., City Architect, Stamp End, Lincoln, not later than 14th MARCH, 1960.

J. HARPER SMITH,
Town Clerk.

Town Clerk's Office,
Lincoln.
18th February, 1960.

FRIMLEY AND CAMBERLEY URBAN DISTRICT COUNCIL.

CLERK OF WORKS (HOUSING).

Applications are invited from suitably qualified persons for the above appointment which is temporary, but its duration is expected to be approximately three years. Applicants must have had considerable experience in the supervision of housing construction, have a sound knowledge of all the trades in connection therewith, including the measurement of all works on the site and the keeping of full records.

The appointment will be subject to one month's notice on either side and the salary will be £832 per annum.

Housing accommodation will be provided if required and reasonable removal expenses will be paid.

Applications, stating age, experience, etc., together with names of two referees, should be delivered to the Engineer and Surveyor, Municipal Buildings, Camberley, Surrey, not later than first post on TUESDAY, 8th MARCH, 1960.

K. S. HARVEY,
Clerk of the Council.

Municipal Buildings,
Camberley.
22nd February, 1960.

BOROUGH OF NEWCASTLE-UNDER-LYME.

Requires:—

(a) ASSISTANT ARCHITECT Special Grade. Salary £785 to £1,070 p.a.

(b) ARCHITECTURAL ASSISTANT Grade A.P.T. II. Salary £765 to £880 p.a.

Applicants for (a) are required to have passed Parts 1 and 2 of the R.I.B.A. Final or Special Final Examinations.

Applicants for (b) should have passed the R.I.B.A. Intermediate Examination.

Commencing salaries will be in accordance with qualifications and experience.

Favourable consideration will be given to the provision of housing accommodation in suitable cases.

Applications should be made to the Borough Surveyor, Lancaster Building, High-street, Newcastle, Staffs., and must be returned to him not later than THURSDAY, 10th MARCH, 1960.

C. J. MORTON,
Town Clerk.

LEEDS REGIONAL HOSPITAL BOARD.

PROPOSED NEW GENERAL HOSPITAL AT HUDDERSFIELD.

CLERK OF WORKS (BUILDING AND STRUCTURAL).

Applications are invited for the appointment of a TEMPORARY CLERK OF WORKS (Building and Structural), in connection with the construction of a new (500 bed) approximate contract value £3,500,000) General Hospital at Huddersfield. Salary £1,200 per annum.

This project will be carried out in consecutive phases under the direction of the Regional Architect, P. B. Nash, A.R.I.B.A., and Messrs. Pite, Son and Fairweather. Preliminary contracts for the formation of the perimeter road and services ring mains and for the work of bulk excavation have been completed. The main building contract is scheduled to start in the immediate future and to continue thereafter for a period of approximately five years.

Applicants must possess a thorough knowledge of all aspects of the building trade and must have had extensive experience as Clerks of Works on multi-storey reinforced concrete framed buildings. Membership of the Institute of Clerks of Works or the possession of the Clerk of Works Diploma of the Association of Building Technicians an advantage.

Previous applicants should re-apply.

Applications, stating age, qualifications, previous experience, together with the names of two Architects to whom reference may be made, to the Secretary, Park-parade, Harrogate, not later than 21st MARCH, 1960.

HERTFORDSHIRE COUNTY COUNCIL.

STEVENAGE BY-PASS.

Qualified QUANTITY SURVEYOR Required, salary £1,245 per annum, for a temporary appointment on site for a period of about 18 months.

Applications (no forms), stating age, qualifications, present salary, with details of experience and names of two referees, to County Surveyor, County Hall, by 8th MARCH, 1960.

CITY OF SALFORD

CITY ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF CLERK OF WORKS.

Applications for the appointment of CLERK OF WORKS are invited from men experienced in the supervision of building construction. The salary scale will be A.P.T. I/II (£610 to £880 per annum), the point of entry depending upon experience, and the hours of work will be those of the building industry.

The appointment is not established but is superannuable and subject to satisfactory medical examination. It is terminable by one calendar month's notice on either side.

Applications stating age, education, qualifications, and details of experience, together with the names and addresses of two referees, should be sent to the City Engineer and Surveyor, Town Hall, Salford 3, Lancs., to arrive not later than THURSDAY, 10th MARCH, 1960.

R. RIBBLESDALE THORNTON,
Town Clerk.

ISLE OF WIGHT COUNTY COUNCIL.

PLANNING ASSISTANT (ARCHITECTURAL) required. Salary A.P.T. Special Grade—£785-£1,070. Permanent post. Candidates should be suitably qualified. Experience in the Planning Department of a local authority essential; preference given to candidates with architectural bias by training or experience.

Applications, on forms obtainable from the Clerk of the County Council, County Hall, Newport, I.W. Closing date 14th MARCH, 1960.

BOROUGH OF MAIDSTONE.

APPOINTMENT OF ASSISTANT CLERK OF WORKS.

Grade Miscellaneous V (£650-£715); commencing salary according to qualifications and experience. Housing accommodation if required. Forms and particulars from Borough Surveyor, Palace-avenue, Maidstone.

T. SCHOLES,
Town Clerk.

13 Tonbridge-road,
Maidstone.

COUNTY BOROUGH OF DUDLEY.

TEMPORARY CLERKS OF WORKS.

Applications are invited for the temporary appointment of CLERKS OF WORKS (two) for the supervision of general building contracts and alteration work within the Borough of Dudley, at a salary on Miscellaneous Grade V—£715 per annum.

Applicants should have a sound knowledge of the building trades, able to interpret architects' drawings and specifications and capable of setting-out, taking levels and keeping site records.

Applications, stating age, experience and present occupation, together with the names and addresses of two referees must be submitted to The Borough Architect, 5 Ednam-road, Dudley, Worcs., not later than FRIDAY, 4th MARCH, 1960.

P. D. WADSWORTH,
Town Clerk.

The Council House,
Dudley,
Worcs.
22nd February, 1960.

HUNTINGDONSHIRE COUNTY ARCHITECT'S DEPARTMENT.

ARCHITECTURAL ASSISTANT, Special Grade, £785-£1,070.

Applications are invited for the above appointment. The successful applicant will become a member of an architectural team engaged in projects of varying size. It is desired that the person appointed shall be keenly interested in architecture with an up-to-date approach to both planning and design.

Application forms may be obtained from S. M. Holloway, A.R.I.B.A., County Architect, County Buildings, Huntingdon, and completed forms should be returned to the undersigned by 14th MARCH, 1960.

A. C. AYLWARD,
Clerk of the County Council.
County Buildings,
Huntingdon.

THE UNITED OXFORD HOSPITALS.

Applications are invited for the post of SURVEYING ASSISTANT at a salary of £545-£765 per annum, commencing salary depending on age and experience, but not exceeding £630 per annum. This salary scale is at present under review.

Applicants must have passed the Intermediate Examination of the Royal Institution of Chartered Surveyors, Building Sub-Division, and have had experience in the preparation of plans for alterations to existing buildings, and be neat draughtsmen.

Applications stating age, qualifications and experience, together with names of three referees, to be sent to the undersigned by 11th MARCH, 1960.

W. F. KEEGAN, A.R.I.C.S.,
Surveyor to the United Oxford Hospitals,
Radcliffe Infirmary,
Oxford.

ROYAL BOROUGH OF KINGSTON-UPON-THAMES.

APPOINTMENT OF TEMPORARY ASSISTANT BUILDING INSPECTOR.

Applications are invited for the abovementioned appointment in Borough Surveyor's Department for not less than two years, subject to satisfactory service. Salary within A.P.T. Division, Grade I, of the National Scales of Salaries and Conditions of Service (£610-£765 per annum) plus appropriate London Weighting. Applicants should have a thorough knowledge of building construction and be experienced in preparing reports on properties. Appointment subject to passing a medical examination, and one calendar month's notice on either side. No housing accommodation provided.

Applications, stating age, qualifications, present and previous employment and experience, with dates, and giving the names and addresses of two referees, must reach the Borough Surveyor by 14th MARCH, 1960.

A. B. ROGERS,
Town Clerk.

Guildhall,
Kingston-upon-Thames.
February, 1960.

ATTENTION ADVERTISERS

Classified advertisements in this section can be accepted up to 12 o'clock noon on the TUESDAY prior to issue. It is regretted that advertisements cannot be accepted by telephone.

OVERSEAS PUBLIC APPOINTMENTS

QUANTITY SURVEYING.

KUMASI COLLEGE OF TECHNOLOGY, GHANA.

Applications are invited for the post of LECTURER IN QUANTITY SURVEYING in the School of Architecture, Town Planning and Building. Applicants should be Professional Associates of the Royal Institution of Chartered Surveyors (Quantity Surveying) and will be required to teach Quantity Surveying Estimating and Valuation for the examinations of the R.I.B.A. and of the I.O.B. Teaching and/or post-qualification professional experience is essential.

Contract appointments are normally for five years, and may be renewed. Three months' notice of resignation of an appointment is required.

The contract salary scale is £1,202 10s. x £65—£2,112 10s. p.a.

A gratuity at the rate of £150 a year is payable at the end of a contract period. Children's allowances are paid up to a maximum of three.

The College is fully residential, and members of staff are housed in pleasant, modern bungalows on the spacious campus; climate and living conditions are good.

Application forms and an Information Brochure may be obtained from the Assistant Registrar, Reference: B/D, Kumasi College of Technology, 29 Tavistock-square, London, W.C.1, who will also be glad to answer any questions about this appointment. The Principal of the College will be in London to interview candidates for this post in April.

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INSPECTOR OF WORKS (DRAINAGE) (M2B/50957/BH).

Candidates must have served an apprenticeship to a building or allied trade and had at least 5 years' subsequent site experience, some of which must be drain laying and plumbing.

Write to the Crown Agents, 4 Millbank, London, S.W.1. State age, name in block letters, full qualifications and experience and quote reference number shown against appointment for which application is made.

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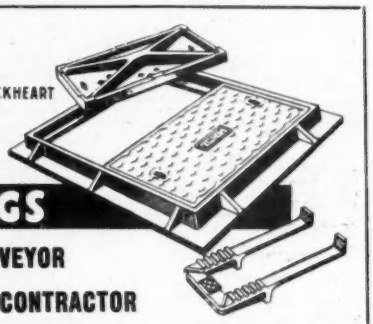

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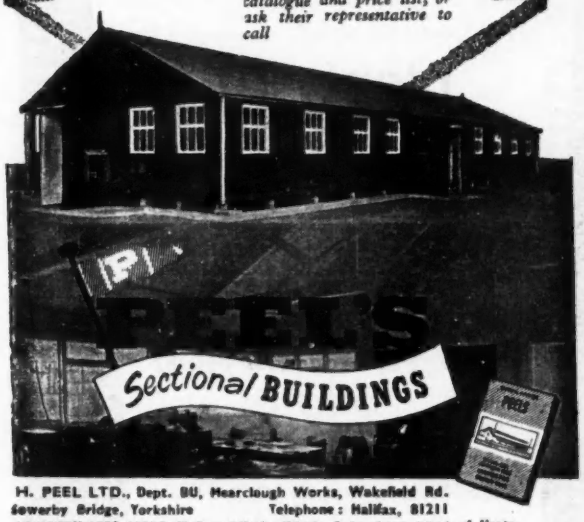

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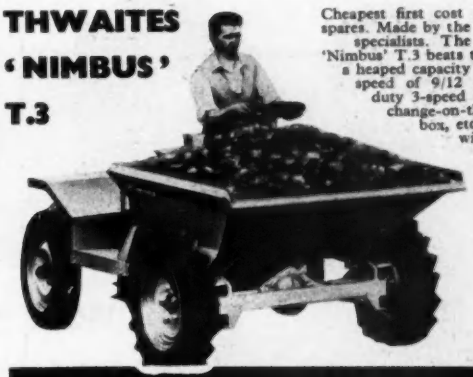

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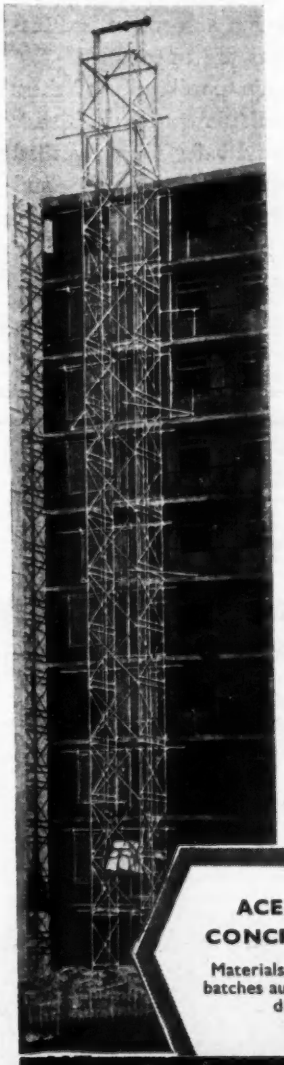

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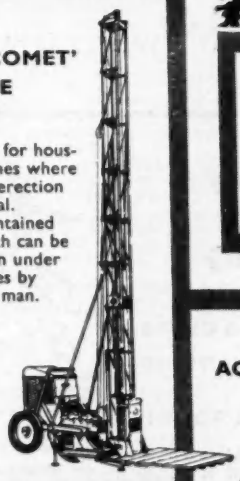

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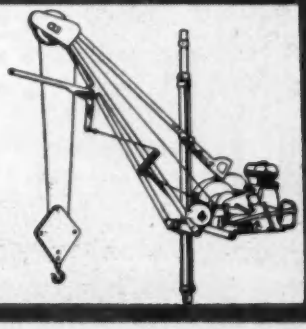

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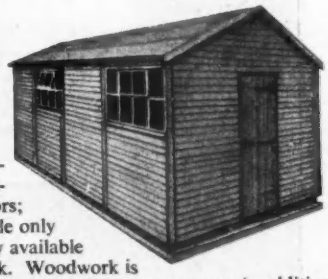

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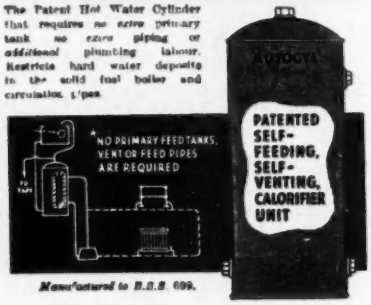

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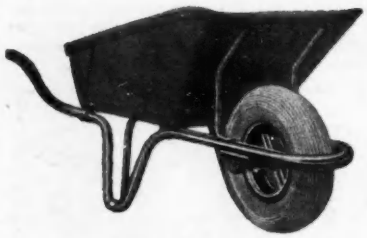

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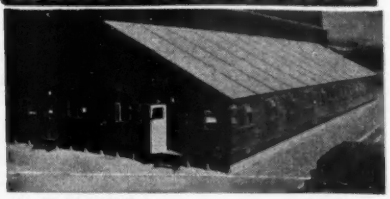

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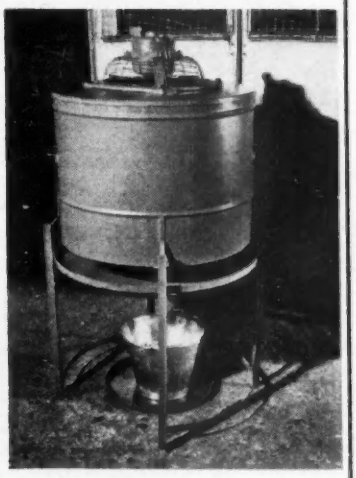

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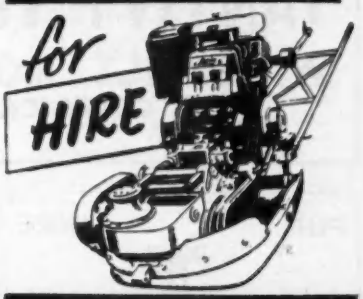

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required with sound knowledge of detailing. Able to prepare sketch schemes, working drawings and specifications. Applications stating past experience, present salary and availability should be sent to the

Personnel Officer,
FAIREY AVIATION LIMITED,
Hayes, Middlesex.

Senior & Junior Architectural Draughtsmen

required for working in connection with the preparation of Housing Development and Flat Schemes. Varied and interesting work. Permanent and progressive position. Pension and Luncheon Voucher Schemes. Salary according to ability and experience.
Write or Phone: **Percy Bilton Ltd., Bilton House, 54/58 Uxbridge Road, Ealing, W.5.** Telephone EALing 7777.

DRAUGHTSMAN/ ESTIMATOR

required or Works and Building Department, Leicester Co-operative Society Ltd. Experience in building alterations, shopfront construction and shopfitting design essential. Salary £900-£1,000 according to qualifications and experience. Good Superannuation Scheme and conditions of employment.
Apply to :—
Manager, Works Department,
Leicester Co-operative Society Ltd.,
Larch Street, Leicester.

COURTNEY, POPE LTD.,
have vacancies for qualified
SHOPFITTING
DESIGNER/DRAUGHTSMEN

Salary according to ability. Write first, giving full particulars, to the Managing Director.

JUNIOR OR TRAINEE DRAUGHTSMAN, aged 16 to 18. Required by firm of Chartered Surveyors in London, S.W.1, for drawing office and general duties.—Write stating age and educational background to Box 1518, "The Builder."

DESIGNERS

A SENIOR
DESIGNER

is required to head an expanding Design Department engaged in design of Reinforced Concrete, Steel and Temporary Structure.
Applicants must be of good personality and have organising ability.

A SENIOR
PLANNING ENGINEER

is required to head an expanding Planning Department engaged in detailed Planning of Civil Engineering and Building Contracts.
Applicants must have had previous experience in a similar capacity and be fully conversant with modern planning and constructional techniques.

AN ASSISTANT
PLANNING ENGINEER

is required for work in detail planning of Civil Engineering contracts at tender and pre-contract stage.
Applicants must have previous experience of planning work in addition to considerable civil engineering construction experience.

AN ASSISTANT
PLANNING ENGINEER

is required for work in detail planning of Building contracts at tender and pre-contract stage.
Applicants must have had previous experience of planning work in addition to building construction experience.
Applications which will be dealt with in confidence must give details of age, experience, qualifications and salary required and addressed to the Personnel Officer, **TARMAC CIVIL ENGINEERING LIMITED,** Ettingshall, Wolverhampton.

FERRO CONCRETE ENGINEERS AND CONTRACTORS

in S.W. district of London have the following vacancies in connection with their programme of expansion :—

2 SENIOR DESIGNERS

Salary range **£1,100—£1,250** per annum.

4 DETAILERS

Salary range **£750—£900** per annum.

MEASURING SURVEYOR

for preparing interim and final accounts. Salary range **£650—£800** per annum.

The Company operate a five-day week and Pension Scheme, and provide luncheon vouchers. Progressive prospects for men with initiative.

Applications will be treated with strictest confidence.
Reply to **Box No. DA.3866**.
c/o **WHITES,**
72, Fleet Street, London E.C.4.

QUANTITY SURVEYORS

QUANTITY SURVEYOR Required for working in conjunction with contractor's own Architectural Department, working mainly on single- and multi-storey prefabricated buildings. Duties will include taking-off and preparation of Bills of Quantities for all trades including external works and dealing with Final Accounts. Bonus and Pension Schemes in operation.—Apply giving full details and salary required to W. J. SIMMS SONS & COOKE LIMITED, Haydn-road, Sherwood, Nottingham.

QUANTITY SURVEYOR, JUNIOR QUANTITY SURVEYOR and WORKER-UP. Required for Westminster Office of Consulting Engineers. Interesting and varied work with good prospects. 5-day week; pension; life assurance, and bonus schemes.—Reply stating age, experience and salary required to L. G. MOUCHEL & PARTNERS, 38 Victoria-street, Westminster, S.W.1, or telephone Mr. Cuthbert, ABBey 1122.

HIGGS AND HILL LTD. Require QUANTITY SURVEYORS for measurement of civil engineering contracts at Oxford and Slough.—Apply stating age, experience, and salary required to the Secretary, Crown Works, South Lambeth-road, London, S.W.8.

SENIOR QUANTITY SURVEYOR Required by Manchester Builders. Experience should cover the ordering of materials, measures and preparation of final accounts. Age 30/40. Salary £750/£950 per annum according to qualifications and ability.—Box 1547, "The Builder."

ASSISTANT SITE QUANTITY SURVEYORS and MEASURING SURVEYORS Required by firm of Chartered Quantity Surveyors for extensive contract in Berkshire.—Apply stating age, experience and salary required to Box 1532, "The Builder."

CO-OPERATIVE WHOLESALE SOCIETY LTD. ARCHITECT'S DEPARTMENT, MANCHESTER.

Applications are invited for appointments as QUANTITY SURVEYORS. SENIOR ASSISTANTS Required for taking-off. Membership of the R.I.C.S. is desirable but not essential. JUNIOR ASSISTANTS with some knowledge of taking-off. Pension scheme and five-day week. Applications, stating age, experience and salary required to G. S. Hay, F.R.I.B.A., Chief Architect, CO-OPERATIVE WHOLESALE SOCIETY, Ltd., 1 Balloon-street, Manchester, 4.

ASSISTANT and JUNIOR QUANTITY SURVEYORS Required for North Wales Contracts by expanding firm of Contractors. Progressive post with Pension Scheme.—Write full details of age, experience and salary required, to Box 1557, "The Builder."

QUANTITY SURVEYOR for Hunterstone N.P.S. SENIOR QUANTITY SURVEYOR Required for preparing final accounts for large section of this contract. Should be A.R.I.D.M., A.I.Q.S., or equivalent standard.—Applications, stating age, experience and when free, should be sent to the agent, MOWLEM (SCOTLAND), Ltd., Hunterstone N.P.S., c/o G.P.O., West Kilbride, Ayreshire.

MANCHESTER. TOZER & PARTNER Require QUANTITY SURVEYORS for settlement of Final Accounts and Taking-Off. Five-day week in operation.—Apply, stating experience, age and salary required, to 13th Floor, Sunlight House, Quay-street, Manchester, 3.

ASSISTANT QUANTITY SURVEYOR Required by POWELL AND LARGE, Chartered Quantity Surveyors, Broadgate House, Coventry. Salary £750-£1,150. Five-day week. Assistance with housing accommodation if required.—Write or telephone Coventry 23303.

JAMAICA. Young qualified ASSISTANT Required for progressive situation, 3-year contract. Commencing salary £1,250 p.a. plus overtime. Passage paid.—Box 1651, "The Builder."

QUANTITY SURVEYOR with thorough experience of final account work Required by London Chartered Quantity Surveyors. Progressive post with good salary.—Apply, stating age, experience and salary required, to Box 909, "The Builder."

SENIOR BUILDING AND QUANTITY SURVEYORS

required for measurement and settlement of main and sub-contract accounts.

Full details of post-war experience, age, salary required, to :

WALKER (TOOTING) LTD.,
Hackbridge Road,
Hackbridge, Wallington, Surrey.

QUANTITY SURVEYOR

for the **LONDON** area required by **MYTON LIMITED** (a member of the Taylor Woodrow Group). Must be experienced in preparation of interim and final accounts. Pensionable position with good prospects. Replies, in confidence, with full particulars to

Personnel Manager,
Myton Limited,
"Western House",
Western Ave., Ealing, London, W.5

QUANTITY SURVEYOR

Permanent position at Head Office of National Contractor in Midlands area for experienced Surveyor to visit large Contracts to prepare progress payment certificates and final accounts including Sub-Contractors. Past previous experience covering this work is most essential. Top rate of salary will be paid to suitable applicant.

Send full details to
Box No. 1546.

JOHN MORGAN (BUILDERS) LTD.,
require
SENIOR QUANTITY SURVEYOR

in the South Wales area. Good prospects, pension scheme. Apply, giving full particulars, to 14 Cathedral Road, Cardiff.

QUANTITY SURVEYORS

Wanted for contracts in the Midlands, Manchester and Liverpool. Must have experience in taking off and Final Account work for large contracts.

Permanent progressive position. Superannuation Scheme.

Apply in first instance, stating salary required, to :
Box No. 938, "The Builder"

MEASURING SURVEYORS

who are prepared to be responsible for contracts in London and the Provinces, from site survey to final account, are required by a National Contractor, to be based at Head Office in London.

The situation offers scope for ambitious young men. Opportunities for promotion and a good salary. Successful applicants will share in the annual staff bonus and join an existing Pension Scheme. Salary will be reviewed regularly. Good allowances when travelling.

Apply in writing, giving age and experience to:
Box 1535 "The Builder"

SENIOR QUANTITY SURVEYOR

required to join the Staff of Richard Costain Limited

The person appointed will be directly responsible to the Chief Surveyor and will be given every opportunity to exercise his initiative in applying modern management technique on building contracts.

Applications are invited from men aged 30-38 with considerable experience of site measurement and the preparation of interim valuations and final accounts. Willingness to work on site is a prime requisite (subsistence paid if this involves living away from home).

Please write to:—

Personnel Officer,
111, Westminster Bridge Road, London, S.E.1.

Plastering Contractors require

EXPERIENCED SURVEYOR

Permanent pensionable position for suitable applicant. Write, stating age, experience, and approximate salary required, to:

The Office Manager,
Jonathan James Ltd.,
52/54, Putney High Street,
London, S.W.15.

A vacancy exists with well known Building & Civil Engineering Contractors in West Middlesex for a

SENIOR SURVEYOR

with sound knowledge and experience of Interim Valuations and Final Accounts. A salary range of £1250/£1500 will be offered to the applicant of proven ability possessing initiative and drive. Pension and Bonus Schemes in operation Full particulars to

Box. No 1276 "The Builder"

JUNIOR SURVEYOR

for the head office of C. J. SIMS LTD., Building & Civil Engineering Contractors. Age 20-25. Applicants must be experienced in all phases of building surveying, from site measuring to preparation of final accounts. Apply, in confidence, giving age, complete details of training, experience and salary required to:

C. J. SIMS LTD.,
2 Victoria Street, S.W.1.

CHIEF BONUS SURVEYOR

required by long established, expanding Company of General Contractors, to set up, organise and take full control of Bonus Department.

Only applicants who have really first class experience in similar capacity will be considered and letters of application should give full details of past career.

All applications will be dealt with personally by the Director concerned, and in strictest confidence.

Write Box No. 1512

SITE QUANTITY SURVEYOR for long term contract at Newport, Mon., Required by Firm of Chartered Quantity Surveyors. Rented accommodation available. Similar appointment exists in Port Talbot office.—Apply, stating age, experience and salary required to Box 1473, "The Builder."

TARSLAG LIMITED have vacancies for a QUANTITY SURVEYOR and ASSISTANT BUILDING ESTIMATOR. These are permanent positions with good prospects. Applications in confidence, giving details of experience, age, and salary required, addressed to Chief Surveyor, TARSLAG, Ltd., Wolverhampton.

QUANTITY SURVEYORS Required by major firm of Building and Civil Engineering Contractors with National interests. Permanent appointments with excellent opportunities for advancement. Good salary and conditions and entry into Superannuation Scheme after 12 months' service.—Applications, which will be treated in the strictest confidence, to THE MITCHELL CONSTRUCTION COMPANY Ltd., Wharf Works, Peterborough.

QUANTITY SURVEYORS Required by Associate Company of national Building and Civil Engineering Contractors, in Leeds. Permanent appointments with excellent opportunities for advancement. Good salary and conditions and entry into Superannuation Scheme after 12 months' service.—Applications, which will be treated in the strictest confidence, to ARTHUR WATERMAN Ltd., Moorland Works, Gelderd-road, Leeds, 12.

EXPERIENCED QUANTITY SURVEYORS Required by leading Contractor for site duties in various parts of the country.—Reply Box 1472, "The Builder."

SENIOR ASSISTANT Required for London Firm of Chartered Quantity Surveyors. Salary up to £1,350 per annum, acording to age and experience. L.V.s. 5-day week, overtime paid and Pension Scheme. —Please apply to Box 1479, "The Builder."

QUANTITY SURVEYORS with sound experience in Taking-off Required for interesting and varied work.—Please write giving full details and salary required or telephone for interview. "Q.S.", LOWTON CONSTRUCTION CO., Ltd., Lowton St. Mary's, Warrington, Lancs. Telephone Leigh 1080.

QUANTITY SURVEYING ASSISTANT or TRAINEE QUANTITY SURVEYOR Required by London Transport for Civil Engineer's (Maintenance) office. Duties: site measuring and working-up bills of quantities for maintenance work. Salary range £412 at age 20 rising to maximum of £767. Commencing salary up to £675 dependent upon age. Extra payments for certain recognised qualifications. 38-hour week; free travel; medical examination; contributory superannuation scheme.—Please apply within 7 days to Staff and Welfare Officer (F/EV.779/3), London Transport, 55 Broadway, S.W.1.

W. & C. FRENCH LTD. urgently Require QUANTITY SURVEYORS aged 25-35 with experience of Civil Engineering and Building contracts, for site work within a radius of 25 miles of Buckhurst Hill.—Apply in writing, stating age, experience and salary required, to Personnel Manager, 50 Epping New-road, Buckhurst Hill, Essex.

THE REED PAPER GROUP

has the following vacancy at Holoplast Limited, New Hythe, near Maidstone, Kent, manufacturers, prefabricators and erectors of laminated plastics.

QUANTITY SURVEYOR

The duties will involve the preparation of Final Accounts to specialist Sub-Contractors building work and to carry them through to final agreement with clients and their Quantity Surveyors. Applicants, aged 20-30, should have knowledge of the Building Trade and be experienced in Quantity Survey Procedure. A "Worker-up" or "Taker-off" would be considered.

Applications, with details of age, education, experience, and quoting reference QS/HOL/B/77, should be addressed to:—

The Group Personnel Officer,
ALBERT E. REED & CO. Ltd.,
Group Office Building,
Larkfield, Nr. Maidstone, Kent.

QUANTITY SURVEYORS Required (all grades) for interesting and varied work. Good salary, annual bonus. Pension scheme. 5-day week.—Apply FAITHFUL & GOULD, Chartered Quantity Surveyors, Eagle House, Colston-avenue, Bristol 1.

JUNIOR QUANTITY SURVEYOR Required by Consulting Engineers in Newcastle/Tyne. Duties comprise working-up, site measurement and junior taking-off. Five-day week.—Write stating age, experience and salary required to MERZ AND McLELLAN, Consulting Engineer, Newcastle-upon-Tyne, 1, quoting reference SAR.

ASSISTANT QUANTITY SURVEYOR studying for Final R.I.C.S. Must be experienced in site measuring and final accounting work; salary by arrangement.—Write, stating age, experience, qualifications, etc., OVE ARUP & PARTNERS, Consulting Engineers, 8 Fitzroy-street, London, W.1.

SURVEYORS

PLASTERING SURVEYOR, used to own initiative; excellent scope and opportunity.—ARC 6727.

JUNIOR BUILDING SURVEYOR and DRAUGHTSMAN Required for medium-sized Building Firm. Knowledge of estimating an advantage but not essential.—Apply in writing stating age, experience and salary required, to R. BUTCHER & SON, 39 George-street, Warminster.

WANTED: CONTRACTOR'S SURVEYOR for measurement of Steel Reinforcement, preparation of Interim and Final Accounts and provision of details for weekly and progressive costing. Applications, stating salary required, to Box 1533, "The Builder."

BUILDING SURVEYOR Required in Management Dept. of old-established and expanding Property Company based in London. A capable draughtsman and specification writer, experienced in conversion/modernisation of properties, preparation/settlement of claims for dilapidations, structural reports, cognisant of London Building Acts and Legislation, essential. Luncheons provided, and non-contributory pension scheme in operation for established staff. A four-figure commencing salary is envisaged.—Applications, giving full relevant particulars, to Box 1534, "The Builder."

BUILDING SURVEYOR Required principally to be responsible for the organisation and supervision of new factory and shop development, but also to assist with general professional work. Good salary and prospects.—Please write with details of experience and remuneration required to STRUCKETT & SON, Chartered Surveyors, 13 New Bridge-street, E.C.4.

QUANTITY SURVEYORS Require SENIOR SURVEYOR in Birmingham area for settlement of Final Accounts. Permanent position with superannuation. Commencing salary £1,000 per annum or according to experience.—Box 1556, "The Builder."

MEASURING SURVEYOR Required. Must be thoroughly competent to deal with 'Labour Only' and 'Labour and Material' sub-contractors accounts, valuations, etc. Current driving licence essential.—Reply in writing in first instance giving full details, etc., to A. E. A. PROWTING, Ltd., Bury-street, Ruislip.

MEASURING SURVEYOR Required for City Chartered Quantity Surveyor's office. Pension and life assurance scheme.—State age, experience and salary to Box 1582, "The Builder."

BUILDERS' SURVEYORS Required, capable of handling contracts from £5,000/£250,000. Must be experienced in Taking-off and ordering materials from Bills of Quantities, interim certificates and final accounts.—Apply in writing, RICHARDSON, Herbert House, Slade Green, Erith, Kent.

ASSISTANT Required for cost planning and estimating by Westminster firm of Chartered Quantity Surveyors. Some estimating experience in Builder's or Surveyor's office essential. Good prospects. Pension scheme.—Write full particulars to Box 1617, "The Builder."

CHARTERED Quantity Surveyors Require, for London office, ASSISTANT, 25-30ish, who is not merely a competent Taker-off, but who also knows how—and is not too proud—to Work-up as well. 5-day week, L.V.s, and opportunities for 18-month tours overseas at considerably higher salary plus free living.—Write, stating U.K. salary required, to Box 1621, "The Builder."

JUNIOR SURVEYOR Required for site measuring in London Area.—Apply stating age, experience and salary required to MESSRS. A. T. ROWLEY (LONDON) LIMITED, Cambridge Works, Lordship-lane, Tottenham, N.17. TOTtenham 3611.

SURVEYOR AGENT—A.M. Contract, Herts. Full control. Knowledge W.D. Schedule essential. Good conditions.—Full details of age, experience and salary to Box 1658, "The Builder."

SURVEYOR—CHIEF SURVEYOR Required by a young, rapidly expanding London Company with a new approach to building construction. Only outstanding applicants will be considered for this post with a Company with an international future.—Apply, giving full particulars of career to date, to A. H. ANDERSON, Ltd., 66 Victoria-street, S.W.1.

MESSRS. OSWALD E. PARRATT Require experienced MEASURING SURVEYOR for their Harlow Office. Five-day week; Pension Scheme. Service agreement to suitable applicant. Housing accommodation may be available.—State age, experience and salary required to Adelaide House, London Bridge, E.C.4.

BUILDER'S SURVEYOR Required to prepare bills of quantities, working drawings, estimates. Assist supervision and office work. Small firm country district near Exeter.—Reply own handwriting giving age, experience, salary required, Box 1393, "The Builder."

EXPERIENCED SITE SURVEYOR for Final Accounts in professional Quantity Surveyors' office in Westminster area. Good salary and prospects for right man. Lunch Vouchers.—Apply Box 995, "The Builder."

SURVEYOR Required by Building Contractors in Manchester area, for preparation of final accounts and sundry estimates.—Apply stating age, experience and salary required to Box 1396, "The Builder."

SURVEYOR and JUNIOR ASSISTANT SURVEYOR Required by long-established firm of building contractors. The former should be a competent estimator and capable of undertaking full surveyor's duties. Superannuation scheme in operation.—Write stating age, qualifications and salary required to W. S. TRY, Ltd., High-street, Cowley, Uxbridge, Middlesex.

CEREBOS GROUP OF COMPANIES

ASSISTANT REQUIRED IN THE GROUP SURVEYOR'S DEPARTMENT

Applicants should have reached either Intermediate or Final Standard R.I.C.S. (Building) and be conversant with alterations and additions to buildings including the preparation of plans and specifications. The position offers an excellent opportunity for a keen, energetic young man between the ages of 23 and 27 to gain experience in many branches of the profession. Good working conditions, pension scheme and non-contributory life insurance.

Applications giving full particulars of age, experience and salary required should be addressed to :

The Secretary, **CEREBOS LIMITED,**
Victoria Road, Willesden, N.W.10.

SENIOR SURVEYOR

required for a large Contract in the Birmingham area.

Apply in confidence, stating age, previous experience and employers to

Chief Surveyor, Tersons Ltd.,
4 Dollis Park, London, N.3.

SENIOR SURVEYOR

Required aged 28–40.

Fully conversant with all aspects of Final Accounts on medium/large contracts. Write fully stating experience, salary expected, etc., to

Chief Surveyor,
Wilson Lovatt & Sons Ltd.,
16 Grosvenor Cres., London, S.W.1

BUILDERS SURVEYORS

Vacancies exist with a well known Building and Civil Engineering Company in London.

Sound knowledge of Final Accounts, Interim Valuations and site measuring required. Excellent opportunity in promotion.

Write in confidence stating age, education, experience and salary required to

Box No. 1575 "The Builder"

SENIOR SURVEYOR and CONTRACTS MANAGER Required by London Building Contractors.—Apply stating experience, age, and salary required. Box 1483, "The Builder."

SITE MEASURER/TAKER-OFF Required by C.Q.S. in West Sussex. 5-day week.—Write, stating age, experience and salary required, Box 1503, "The Builder."

CHARTERED QUANTITY SURVEYORS, Strand area, have vacancy for JUNIOR ASSISTANT with experience in quantity surveyor's office of taking-off and site measuring, etc.—Reply stating age, education, practical experience, salary, etc., Box 1459, "The Builder."

SUPERVISOR/SURVEYOR. Energetic man required for expanding housing department, to organise works, carry out negotiations with trades sub-contractors, including strict supervision to completion. Experienced persons only need apply for position with excellent prospects. Pension scheme in operation.—Apply giving full particulars to Housing Director, PERCY BILTON Ltd., Bilton House, 54/58 Uxbridge-road, Ealing, W.5. Telephone: EALing 7777.

MEASURING SURVEYOR Required for housing contracts in Home Counties and South Midlands. Experienced in final accounts, interim valuations, sub-contractors, etc. Car driver preferred. Contributory superannuation scheme.—Applications giving brief details of experience, age, salary required and when free to F. J. MINNS & CO., Ltd., 9 Westway, Botley, Oxford.

SURVEYOR with drive and initiative Required for expanding company, North London. Knowledge of Estate Development desirable.—Box 1437, "The Builder."

BONUS SURVEYORS REQUIRED

excellent opportunities for advancement in an expanding department of the Company.—Applications with details of experience and qualifications to Box No. S503, LEE & NIGHTINGALE Ltd., Liverpool.

KENSINGTON and Strand firm of General Practice Surveyors and Estate Agents Require a qualified BUILDING SURVEYOR for their survey department at Kensington; the work includes new buildings, conversion, dilapidations, Surveys, maintenance, etc. Salary £800-£900.—Apply to Mr. Baldock, 125 Gloucester-road, S.W.7. Fremantle 2364.

CHARTERED Quantity Surveyors Require SITE MEASURER and JUNIOR TAKER-OFF.—DANIEL B. CONNAL & PARTNERS, 100 High-street, Southend-on-Sea.

JUNIOR SURVEYOR Required by Civil Engineering and Building Contractors in Middlesex. Applicants must be capable of preparing site measurements for Interim/Final Accounts and Subcontractors. Good prospects for a young man with initiative.—Write, giving full details of experience, age and salary required, to Box 1279, "The Builder."

ASSISTANT ESTIMATING SURVEYOR Required by National Firm of Contractors at their Middlesex Office. Must be experienced in the preparation of Bills of Quantities, and be able to prepare material schedules for ordering.—Write, giving full particulars of age, experience and salary required, to Box 1282, "The Builder."

JUNIOR SURVEYOR Required for Building Surveyor's City office for site work, measuring variations, etc., on conversion contracts.—Write stating experience and salary required to Box 1325, "The Builder."

ASSISTANT Required for Eastern Counties office of London Quantity Surveyors to measure up Contracts, prepare interim certificates and final accounts. Good prospects. Write stating age, experience and salary required.—Box 1375, "The Builder."

LONDON Chartered Quantity Surveyors Require ASSISTANTS for their Cambridge Office for Final Accounts and Taking-off.—Reply, stating experience, age and salary required, to Box 1042, "The Builder."

SITE SURVEYOR

(ASSISTANT)

Richard Costain Limited invite applications from young men interested in the use of modern management techniques on building sites for the above post.

Candidates must have experience of site measurement and the preparation of certificates and must be prepared to work anywhere in the U.K. A subsistence allowance will be paid in addition to salary where site work necessitates living away from home.

Please write to :—

Personnel Officer,
111, Westminster Bridge Road,
LONDON, S.E.1

SUPERVISING SURVEYOR

(Age 30/35)

Alterations and Decorations (Small Works). Able to estimate and organise own contracts. Good salary and annual bonus on results. Free Pension Scheme.

Box No. 1630, "The Builder"

SURVEYOR

SMALL WORKS DEPARTMENT

Surveyor (25–35 years of age) required in the Small Works Department of a firm of National Contractors situated in the Westminster area. Applicants must have a good manner and address and be able to handle work from inquiry to final account. Write giving fullest particulars to—

Box No. 1577, "The Builder"

LAURENCE WEAVER LIMITED

Due to 1960 expansion we offer the following positions:

ASSISTANT SURVEYOR

required for preparation of labour and materials schedules. Site experience essential. Promotion to site supervision in near future.

SITE ENGINEERS

required for the setting out and controlling of site works. Willing to travel in southern England.

SETTING OUT ENGINEER

Previous experience essential.

SITE AGENTS

Young site agents under 35 years with considerable site experience, preferably private enterprise house developments, required for positions of exceptional opportunity.

Top salaries by arrangement. Apply Secretary,
45 Ledgers Road, Slough.

ASSISTANT SURVEYORS

required for

Site Measuring, Interim Valuations and assisting in Final Accounts for high class Commercial and Industrial Contracts, mainly Office Buildings and high grade Factories or Warehouses.

Applicants must be fully experienced and if appointed to permanent staff will become eligible for Company's non-contributory Life Insurance and Pension Scheme.

Applications in writing, stating age, technical education and experience to:

McLAUGHLIN & HARVEY, LTD.,
24, Highbury Grove, N.5.

ASSISTANT SURVEYOR

for

DECORATING DEPARTMENT

Well-known firm of London Contractors require an Assistant Surveyor for their Decorating and Painting division which is continually expanding and where there is abundant scope. Whilst it is preferred that applicants should have a good knowledge and experience of the trade mentioned it is not wholly essential. Give fullest particulars in first instance to—

Box 1576 "The Builder"

RESIDENT SURVEYORS

urgently required

for large London Contracts

Applicants with H.N.C. or I.O.B. qualifications write or 'phone:—

Y. J. LOVELL & SON LTD.
4, Endsleigh Gardens, W.C.1.
(EUS 6223)

SURVEYOR

Age 25-40 required by

London Contractor handling Industrial Developments throughout the United Kingdom.

H.N.C. standard, willing to travel, good personality and adaptability essential. Contracts : £50,000 to £1 m. Pension scheme. Good prospects of promotion in a rapidly expanding Company. Salary in keeping with age, experience and qualifications. *Full details in confidence to:*

Box 1616, "The Builder."

MEASURING SURVEYORS

Required for London Contracts by North London Company with expanding business, able and ambitious men, capable of assuming increasing responsibility.

Work consists of measuring own work, work of labour only Sub-Contractors (mainly excavation and formwork), work of specialist Sub-Contractors, certifying payments on account, dayworks, preparation of variation claims and interim valuations.

Apply in writing, giving full details of experience and age to

Box No. 1635, "The Builder"

CHIEF ESTIMATOR SURVEYOR

Man of outstanding drive and ability required to join young team in progressive company that has doubled output in each of last three years.

Immediate salary £1,200 per annum rising £200 per annum to £1,800 plus bonus.

The post will only be attractive to the man who is prepared to set hard work and long hours against future prospects.

Apply in confidence to the Managing Director

T. PROJECTS LIMITED
4 Lion Street, Kidderminster

giving details of career to date.

MCMANUS & CO LTD

require

MEASURING SURVEYORS

and an assistant at Potters Bar.

Excellent prospects for keen young men with drive and initiative. Apply, stating age, experience and salary required, to:

The Chief Surveyor,
Mimms Hall Road,
Potters Bar, Middlesex.

BUILDING SURVEYOR. Intermediate standard with minimum of two years' good office experience. Required for Architect's and Surveyor's office. Used to Specifications and small Building Contracts, some drawing ability an advantage. Five-day week, luncheon vouchers. Salary according to experience up to £700 per annum.—Please reply to Box 918, "The Builder."

BUILDING SURVEYORS Required for Bristol Office. Should be Intermediate to Final R.I.C.S. standard, with land and site survey experience, and used to supervision of building contracts.—Applications should include full details of experience, age and salary required, W. H. WATKINS, GRAY AND PARTNERS, 1 Clare-street, Bristol, 1.

MEASURING SURVEYOR/TAKER-OFF for London Quantity Surveyors, able to handle Interim Valuations, Deviations and Final Accounts. Must be willing to travel. Salary according to experience and ability.—Box 934, "The Builder."

REQUIRED by Established Reinforced Concrete Engineers. SURVEYOR, fully experienced in Taking-off and measuring for final accounts. Position is permanent, pensionable and progressive.—Write stating age, experience and salary required to Box 985, "The Builder."

ASSISTANT SURVEYORS

ASSISTANT SURVEYOR Required for site measurement with Quantity Surveyors and Sub-contractors and final account preparation. Permanent position.—Write stating age, experience and salary required to SPICERS (BUILDERS) LIMITED, Ombersley-road, Worcester.

ASSISTANT BUILDER'S SURVEYOR for Small Contracts Department which specialises in handling contracts up to £20,000. Would suit a young man who has had two or three years' experience with a small builder and who has had some surveying training.—Apply stating age, experience and salary required to Personnel Manager, FORD & WALTON, Ltd., Walton House, Warton-road, E.15.

TECHNICAL ASSISTANT, age 30-35 Required for the Survey Department of large S.E. London residential estate to assist generally with specifications and supervision of maintenance repairs and other building works, preparation of lease plans, costings and accounts and general duties of the Department. Pension Scheme. Commencing salary in region of £625 according to qualifications.—Write stating age and experience to Box 1419, "The Builder."

ASSISTANT BUILDING SURVEYOR Required for preparation of estimates from drawings and specifications and site measuring. Age 19-22.—Write giving full particulars to WHYATT (BUILDERS), Ltd., 225 Streatham High-road, S.W.16.

SOUTHSEA Chartered Quantity Surveyors Require ASSISTANT SURVEYOR for Taking-off and local site measuring. Permanent position with expanding firm having widespread commitments. Non-contributing life assurance and pension scheme for permanent staff.—Write stating age, experience and salary required, THOMAS, JOLLY, GRANT & KELSEY, Architects and Surveyors, 26 Kent-road, Southsea, Hants.

TECHNICAL ASSISTANT (ESTATE) Required in Surveying Department of London office. Applicants must be members of a recognised professional institute and have experience of the management of a large number of scattered properties of all types, but mainly industrial. A sound knowledge of property law, leases, dilapidations, valuations for purchase and rent, rating and office administration is required; with the ability to initiate action in such matters and to handle them with limited supervision. Salary £1,115-£1,220.—Applications giving age, experience and qualifications to Divisional Manager (SV.109), BRITISH ROAD SERVICES, Ltd., 238 City-road, London, E.C.1.

ASSISTANT BUILDING SURVEYOR with knowledge of estimating, age about 25. Required for old-established medium-sized Building Contractors, S.E.1 district. Salary £700 to £800 per annum.—Applications should be submitted in writing stating age, experience, etc., to Box 1594, "The Builder."

PLASTERING—ASSISTANT SURVEYOR, excellent prospects for young man seeking advancement and a permanent job.—Write with details of experience, age and salary, JEFFRIES & GRANT Ltd., 115 Gunnersbury-lane, Acton Town Station, W.3.

JUNIOR ASSISTANT with at least 1 year's office experience Required by London Chartered Quantity Surveyors in their Pitsea, Essex, office.—Reply to Box 1614, "The Builder," giving full particulars and salary required.

JUNIORS

JUNIOR Required by Building Surveyors (City), varied and interesting work. Some draughtsmanship ability essential. Salary £6 to £7 per week.—Apply Box 1196, "The Builder."

TAKERS OFF

REQUIRED immediately in London, temporary TAKERS-OFF, leading to permanency if required.—Reply, stating age, experience, and salary required, to Box 1383, "The Builder."

EXPERIENCED TAKER-OFF (A.R.I.C.S.) Required by DEARLE & HENDERSON, Chartered Quantity Surveyors, 75 Victoria-street, S.W.1. Five-day week, Superannuation scheme.—Write or 'phone ABBey 2841.

SENIOR TAKER-OFF Required by London Chartered Quantity Surveyor.—Please write stating age, experience and salary required to Box 964, "The Builder."

TAKERS-OFF Required by London Chartered Quantity Surveyors for permanent staff.—Write stating age, experience and salary required to Box 916, "The Builder."

JUNIOR TAKER-OFF Wanted in City Chartered Quantity Surveyor's Office. Good prospects and superannuation scheme.—Box 1441, "The Builder."

CHARTERED Quantity Surveyor (London, W.1) Requires capable TAKER-OFF, age 25 to 30. Varied and interesting work.—Please write stating age, experience and salary required, Box 1460, "The Builder."

LONDON Firm of Chartered Quantity Surveyors Require experienced TAKERS-OFF and WORKERS-UP for long term contracts in South Wales.—Please apply, stating age, experience and salary required, to Box 1478, "The Builder."

JUNIOR TAKER-OFF (Intermediate R.I.C.S. standard), with experience. Required by Sussex C.Q.S. Five-day week. L.V.s.—Write, stating experience and salary required, Box 1096, "The Builder."

JUNIOR TAKER-OFF

Required by Firm of Chartered Quantity Surveyors in London (A.R.I.C.S. preferred). Salary £750-£950. Pension Scheme. L.V.s. —Please write, stating age, experience and salary required, to Box 1475, "The Builder."

TAKER-OFF of Intermediate to Final standard Required by Westminster Quantity Surveyors. Excellent prospects in London Office and opportunities for overseas tours.—Apply, stating age and experience, Box 923, "The Builder."

SENIOR TAKER-OFF Required by firm of Quantity Surveyors in Victoria area. Varied work and excellent prospects.—Apply with brief details of qualifications and experience, Box 927, "The Builder."

MANCHESTER Quantity Surveyors (London Firm) Require TAKER-OFF. Need not be qualified but must be thoroughly experienced. Five-day week. Paid overtime. Pension Scheme.—Box 924, "The Builder."

SENIOR TAKERS OFF Required in Bloomsbury Chartered Quantity Surveyors' Office. First-class working conditions, including Luncheon Vouchers and pension scheme, with good prospects offered to suitable applicants.—Apply, stating age, qualifications, academic background and salary required, to Box 1559, "The Builder."

TAKER-OFF, final standard, Required by medium-size Chartered Quantity Surveyors. City area. Salary according to age and experience.—Box 1562, "The Builder."

EXPERIENCED TAKER-OFF/ MEASURING SURVEYOR

A.R.I.C.S. preferred, for Chartered Quantity Surveyors' site office in North Lincolnshire. —Apply, stating age, experience and salary required, to Box 1480, "The Builder."

WESTMINSTER Quantity Surveyors have a vacancy for a recently qualified TAKER-OFF, salary £900-£1,000. Pension scheme; luncheon vouchers; five-day week. In addition to normal duties experience will be provided in cost control methods and the post should be of particular interest to a young Quantity Surveyor who has a penchant for research. —Apply in writing to LEMON & BLIZARD, 59 Tufton-street, London, S.W.1.

JUNIOR TAKER-OFF/WORKER-UP Required in Quantity Surveyor's office. Varied and interesting work.—Apply in own handwriting stating age, experience and salary required to CROOT & PARTNERS, City Chambers, Catherine-street, Salisbury.

TAKER-OFF Required for City Chartered Quantity Surveyors. Pension scheme.—State age, experience and salary to Box 1580, "The Builder."

JUNIOR TAKER-OFF, Intermediate standard. Required by Chartered Quantity Surveyors near London Bridge. Five-day week, Pension scheme.—State age, experience and salary to Box 1581, "The Builder."

WAKEMAN, TROWER AND PARTNERS,

Quantity Surveyors, St. Paul's House, St. Paul's Street, Leeds, 1, require the following staff :—

SENIOR TAKER OFF	**Salary £1,000-£1,500 p.a.**
JUNIOR TAKERS OFF, SITE SURVEYORS	**Salary £650-£950 p.a.**
SENIOR WORKER UP	**Salary £750-£1,000 p.a.**
JUNIOR WORKER UP	**Salary £450-£600 p.a.**

MANCHESTER. Quantity Surveyors (London Firm) Require Staff. Good salary. Overtime. Pension Scheme. Five-day week. (a) SENIOR TAKER-OFF. Must be experienced man. (b) SENIOR MEASURING SURVEYOR. For duties on Final Accounts. (c) SENIOR WORKER-UP. Must be experienced man. Willing to take responsibility.—Box 926, "The Builder."

TAKER-OFF/MEASURING SURVEYOR (taking Final this year or recent A.R.I.C.S.), single, car or cycle licence, Required for long-term appointment in branch Site Office in Berkshire by London Chartered Quantity Surveyors. Tax free subsistence allowance. Superannuation Scheme. Five-day week.—Write full particulars to Box 1612, "The Builder."

JUNIOR and SENIOR TAKERS-OFF Required by London Chartered Quantity Surveyors.—Box 1619, "The Builder."

TAKER-OFF, aged 20-30 years, Required by Chartered Quantity Surveyors in Victoria. Varied and interesting work with good prospects of advancement for conscientious and hard-working person.—Write stating age, experience and salary required: Box 1618, "The Builder."

AUSTRALIA, SYDNEY. Experienced TAKER-OFF Required for 3-year contract. £A1,800, £A1,900, £A2,000 p.us considerable overtime. Fares to Australia paid. Continuation contract probable if required.—Box 1652, "The Builder."

JUNIOR TAKER-OFF of some experience Required for permanent position with good prospects of advancement.—Please apply stating age, experience and salary required to STONER & SONS, 260-262 Bank Chambers, 329 High Holborn, London, W.C.1.

SENIOR AND JUNIOR TAKERS-OFF for Chartered Surveyor's Office near Victoria Station. Permanent position, excellent prospects, bonus scheme, five-day week.—State age, experience, salary required, Box 1650, "The Builder."

EXPERIENCED TAKER-OFF Required in Quantity Surveyor's Office.—Reply stating age, experience and salary required to E. R. BABBS & SONS, 187 Piccadilly, London, W.1.

FIRST-CLASS JUNIOR TAKER-OFF Required by young professional office. Salary up to £1,000 p.a.—Box 1655, "The Builder."

EXPERIENCED TAKER-OFF, preferably chartered, Required by London firm of Chartered Quantity Surveyors for permanent position.—Please reply stating salary required, details of previous experience and age to Box 1648, "The Builder."

JUNIOR TAKER-OFF, approaching final standard, for small firm; progressive position on varied work. State age, experience and salary required to S. J. FLOOD, 2 Lowndes-street, S.W.1, or 'phone: Belgravia 3512.

SENIOR TAKER-OFF Required by Quantity Surveyors in Victoria area for varied types of Contracts from taking-off to final account. Very good prospects for advancement; pension scheme; Luncheon Vouchers.—Write stating age, experience and salary required, Box 1653, "The Builder."

SENIOR TAKER-OFF Required by Chartered Quantity Surveyors, Rochester, Kent. Reply stating age, experience and salary required.—Box 1636, "The Builder."

TAKER-OFF Required by Chartered Quantity Surveyors in Reading area.—Apply Box 1558, "The Builder."

WORKERS UP

WORKER-UP seeking opportunity as TAKER-OFF Required by small firm of London, W.1, Chartered Quantity Surveyors.—Write, stating age, experience and salary required, to Box 1527, "The Builder."

EXPERIENCED WORKER-UP Required by Holborn Quantity Surveyors. Good prospects for experienced applicant. Salary approximately £1,000 per annum.—Please write, giving full details, to Box 1537, "The Builder."

EXPERIENCED WORKER-UP Required by London Chartered Quantity Surveyors. Good salary for suitable applicant.—Write Box 1538, "The Builder."

REQUIRED immediately in London, temporary WORKERS-UP, leading to permanency if required.—Reply, stating age, experience, and salary required, —Box 1384, "The Builder."

MANCHESTER. WORKER-UP / SITE MEASURER Required for Chartered Quantity Surveyor's office in Manchester. 5-day week.—Apply to ROBERT G. W. FORDE, A.R.I.C.S., 96 Mosley-street, Manchester, 2.

EXPERIENCED WORKER-UP Required by London Quantity Surveyors.—Write, stating age, details of experience and salary required, to Box 954, "The Builder."

SENIOR WORKER-UP for London Quantity Surveyors.—Write, stating age, details of experience and salary required, to Box 953, "The Builder."

WORKERS-UP Required by London Chartered Quantity Surveyors for permanent staff.—Write stating age, experience and salary required to Box 905, "The Builder."

WORKER-UP Required by London Chartered Quantity Surveyors. High remuneration for good worker.—Please reply, in confidence, to Box 986, "The Builder."

AUSTRALIA, Sydney. Experienced WORKER-UP Required for 3-year contract, £A1,450, £A1,500, £A1,550 plus considerable overtime. Fares to Australia paid. Continuation of contract probable if required.—Box 1129, "The Builder."

JUNIOR WORKER-UP with some previous experience Required in Gray's Inn Quantity Surveyors' Office. Permanent position with opportunities for rapid advancement.—Box 1238, "The Builder."

JUNIOR WORKER-UP Required in Chartered Quantity Surveyor's office, London, W.1, area. Opportunity at a later date to learn Taking-off.—Please write, stating age, experience and salary required. Box 1376, "The Builder."

WORKER-UP
for long term contract at Newport, Mon., Required by Firm of Chartered Quantity Surveyors. Rented accommodation available. Similar appointment exists in Port Talbot office.—Please write, stating age, experience and salary required, to Box 1477, "The Builder."

WORKER-UP Required in City Chartered Quantity Surveyor's Office, to take charge. Established position for right man. State experience and salary required.—Box 1440, "The Builder."

WORKER-UP
for permanent position in London Office of Chartered Quantity Surveyors. Pension Scheme and L.V.s.—Please write, stating age, experience and salary required, to Box 1476, "The Builder."

WORKERS-UP and intelligent JUNIORS, wishing to train for and qualify as Chartered Quantity Surveyors, Required in Bloomsbury Chartered Quantity Surveyors' Office. First-class working conditions, including Luncheon Vouchers, and opportunities for progressive training offered to suitable applicants.—Apply, stating age, experience, if any, academic background and salary required, to Box 1560, "The Builder."

WORKER-UP or JUNIOR WORKER-UP Required in professional office. Opportunity for advancement. Overtime.—Write stating age, experience and salary required to ARTHUR J. BAILEY, A.I.A.S., 1448a London-road, Leigh-on-Sea.

WORKER-UP with 3 years' experience Required in medium-size Chartered Quantity Surveyors' office. Opportunity for taking-off according to ability. City area.—Box 1561, "The Builder."

WORKER-UP Required by City Chartered Quantity Surveyors. Five-day week, Pension scheme.—State age, experience and salary required to Box 1578, "The Builder."

EXPERIENCED WORKER-UP Required by Quantity Surveyors near London Bridge. Pension scheme; overtime.—State age, experience and salary required to Box 1579, "The Builder."

SENIOR WORKER-UP Required by West End firm of Quantity Surveyors at their Slough office. Salary £800 per annum; 5-day week. Non-contributory pension scheme.—Apply Box 1583, "The Builder."

EXPERIENCED WORKER-UP Required by firm of Chartered Quantity Surveyors in West End, London.—Reply stating experience, age, salary required to Box 931, "The Builder."

WORKER-UP Required by London Chartered Quantity Surveyors.—Box 1620, "The Builder."

WORKERS-UP with two to three years' previous experience Required by West End firm of Chartered Quantity Surveyors.—Reply stating age, experience and salary required to Box 1622, "The Builder."

WORKER-UP with 18 months' experience, for small firm, and to assist in settlement of final accounts on varied work.—State age, experience and salary required to S. J. FLOOD, 2 Lowndes-street, S.W.1, or 'phone: Belgravia 3512.

WORKER-UP Required for Quantity Surveyor's office in Victoria area. Good prospects; Luncheon Vouchers. Write stating age, experience and salary required, Box 1654, "The Builder."

SENIOR WORKER-UP Required to take charge of Department in Westminster Quantity Surveyor's Office.—Please write stating age, experience and salary required to Box 945, "The Builder."

WORKER-UP Required by POWELL AND LARGE, Chartered Quantity Surveyors, Broadgate House, Coventry. Opportunity at later date to learn taking-off. Salary according to age and experience.—Write or telephone Coventry 23303.

WORKER-UP, with at least three years' experience Required by London (W.C.1) firm of Chartered Quantity Surveyors.—Please reply stating age, experience and salary required to Box 1649, "The Builder."

EXPERIENCED WORKER-UP
Required by Chartered Quantity Surveyors for site office at Scunthorpe.—Apply, stating age, experience and salary required to Box 1481, "The Builder."

ENGINEERS

SENIOR and JUNIOR ENGINEERS and MEASURING SURVEYORS are Required for Building Contracts in England. These are permanent appointments with good prospects. Bonus and Superannuation Schemes in operation.—Applications, which will be dealt with in strict confidence, must give details of age, experience, qualifications and salary required and should be addressed to Personnel Officer, TARMAC CIVIL ENGINERING Ltd., Ettingshall, Wolverhampton.

ENGINEERING ASSISTANT Required for South Coast office. Experience in surveying, road and sewer design and housing layouts essential. Good working conditions and pension scheme with progressive design and construction Company.—Box 1404, "The Builder."

WORK STUDY ENGINEER

Progressive Company handling large Building projects in London, controlled from West/Central London office, require a trained W.S. Engineer. Applicants having undoubted enthusiasm and initiative will be given the opportunity to develop and head a Work Study Section of the Planning Department. Staff bonus and superannuation schemes in operation. Age limits 25/35 years. Applications in strict confidence giving brief particulars of training, experience, salary, age, etc., to

Box No. 1461, "The Builder"

SITE ENGINEERS

B. & C.E. Contractor in Midlands area of National repute has vacancies for several Engineers for a variety of Contracts to start shortly. Applicants should be experienced in setting out, foundations, all external services, reinforced concrete and records. The positions are suitable for young ambitious men and offer much scope for early promotion. A good commencing salary is offered. Send details to:

Box 1545 "The Builder"

WORK STUDY AND PRODUCTION ENGINEER Required by Industrial Consultants. Knowledge of building industry desirable. Excellent prospects with opportunity of Partnership in established firm.—Apply Box 1623, "The Builder."

ASSISTANT ENGINEER AND SURVEYOR Required in Bishop's Stortford area office, capable of surveys, levelling, setting-out and working drawings. Estate developments experience an advantage. Starting salary up to £728 per annum.—Write giving details of age and experience to Chief Engineer, BOYD GIBBINS, Ltd., Bishop's Stortford, Herts.

ESTIMATORS

ESTIMATOR/SURVEYOR Required to assist Chief Estimator with view to taking over that position. Must be experienced in Taking-off, estimating, final accounts. Medium size Builder, Reading.—Write, stating age, experience and salary required, Box 1529, "The Builder."

JUNIOR ESTIMATOR/SURVEYOR urgently Required for Building and Civil Engineering Contractors based in Kensington.—Apply in writing, briefly stating age, experience and salary, W. WALKERDINE, Ltd., 115a Walmer-road, Kensington, W.10.

FULLY experienced ESTIMATOR Required by well known firm of Building Contractors in the North West area. Applicants should be capable of pricing contracts up to £500,000 and this position is pensionable.—Applications stating age, experience, to Box 1539, "The Builder."

BUILDING Contractor Requires JUNIOR for estimating department. Excellent prospects for intelligent and conscientious youth.—Apply in writing to the Personnel Officer, TARMAC CIVIL ENGINEERING Ltd., Ettingshall, Wolverhampton.

ESTIMATOR/SURVEYOR/PLANNER Required by small London Building Company. This firm is ready for expansions and requires somebody with lots of push.—Write Box 1385, "The Builder."

ESTIMATOR and OFFICE MANAGER Required for busy old-established Builders. Excellent prospects. House available if required. Salary by arrangement, staff of 40, contracts up to £20,000. All applications replied to.—Apply Box 1415, "The Builder."

BUILDING ESTIMATOR SURVEYOR Required for permanent Senior position with Contractor in South Devon Coast Resort. Must be fully experienced in taking-off quantities, pricing and preparation of Final Accounts.—Replies stating age, experience and salary to Box 1417, "The Builder."

ESTIMATOR'S ASSISTANT Required to extract and control subcontractor's and supplier's inquiries, and to assist generally. First-class opportunity for keen, intelligent man eager to learn estimating.—Reply Box 1272, "The Builder."

ESTIMATOR Required for Small Works Department. Must be fully experienced in Site Measurement all Trades, taking-off and pricing from Drawings and Specifications and preparing Interim Certificates and Final Accounts.—Apply in writing, stating age, experience and salary required to GRACE & MARSH Ltd., New Bridge Works, Waddon, Croydon.

ESTIMATOR Required for Conversions, Small Works Decorations, etc.—Write or 'phone experience and salary required, SHAW & WRIGHT, 3 Wigmore-place, W.1. LANgham 4004.

ESTIMATOR/SURVEYOR Required by old-established Building Contractor, East London. Capable of dealing with Contracts from enquiry to final account. Taking-off own quantities from drawings if necessary or pricing Bills up to £50,000.—Write, stating age, experience and salary required, to Box 1342, "The Builder."

ESTIMATOR/SURVEYOR Required for S.E. Kent Building Contractors, experienced in small works and medium sized contracts from Enquiry to Final Account.—Apply with full particulars to Box 1442, "The Builder."

ESTIMATOR.—Applications are invited by Civil Engineering and Building Contractors for the position of ESTIMATOR in their head office. Applicants must have had previous site experience and preferably a number of years' experience in the preparation of Tenders for heavy civil engineering and industrial building contracts, including reinforced concrete framed structures. The position is permanent and carries a good salary, bonus and conditions, and entry into the superannuation scheme will be arranged after 12 months' service.—Applications, giving full details of previous experience, will be treated in strictest confidence, and should be addressed to THE MITCHELL CONSTRUCTION CO., Ltd., Wharf Works, Peterborough.

KENSINGTON builders Require an ESTIMATOR/SURVEYOR. Experienced in Taking-off quantities, measuring on site and estimating for alteration and repair work up to about £20,000. Salary according to experience up to about £900 p.a.—Write or telephone Director, R. MANSELL, Ltd., 133 Oxford-gardens, W.10, and we will send a form for your details.

ESTIMATOR/SURVEYOR Required. Applicants must be capable of dealing with contracts up to £40,000 from enquiry to final account.—Apply in writing stating age, salary required and giving full details of experience to WILLIAM WILLETT (Builders and Decorators), Ltd., Sloane-square, S.W.1.

PAINTING Contractors Require ESTIMATOR experienced in pricing Bills of Quantities, site measuring and preparing estimates for commercial and industrial work.—Write fully stating age, experience, salary required, PERROTT GRENVILLE, Ltd., 58 Kensal-road, W.10.

ESTIMATOR/SURVEYOR Required by London Contractors, must be capable of dealing with small contracts from enquiry to final account. This appointment particularly suitable to young man with drive and initiative.—Reply stating age, experience, and salary required to Box 1488, "The Builder."

ESTIMATOR Required by Builder, Beckenham. Must be capable man used to tendering for general building works. Sound position for sound man.—Box 925, "The Builder."

ESTIMATOR AND SURVEYOR Required by THE JOHN LEWIS PARTNERSHIP Works and Maintenance Department at Perivale, Middlesex, employing approximately 50 operatives (all trades). Applicant must be experienced in preparing estimates from bills of quantities, drawings and specifications also prepare maintenance schedules and must be able to handle and control contracts from enquiry to final account (maintenance and some capital works). Pay not less than £750 p.a. All workers are partners and share all profits, with sick pay, shopping discount and four weeks' holiday a year.—Write to Manager, Works and Maintenance Department, 13 Alperton-lane, Perivale, Greenford, Middlesex.

PLUMBING ESTIMATOR

BUILDING ENGINEERING CONTRACTORS LTD.

Present the opportunity of 1960—
Go forward to the 1970's with us.

We want a competent man who will relieve the existing management of responsibility. We are prepared to pay a generous salary with bonus. This is a progressive position under good conditions at our London Head Office.

Make an appointment for an informal interview with out Managing Director.

BISHOPSGATE 8321.
BUILDING ENGINEEPING HOUSE, DYSART STREET, FINSBURY SQUARE, LONDON, E.C.2.

INDUSTRIAL PAINTING

TOP WEIGHT MAN
FOR
SUBSTANTIAL LONDON COMPANY

Keen Estimator and Supervisor with the necessary contacts to enlarge an already thriving business.

Candidate should be about 35 yrs. A good disciplinarian and with the experience to permit him to make a highly remunerative career for himself. The position is pensionable (non-contributory) and carries with it an annual bonus on results.

Box No. 1631.

SENIOR ESTIMATORS

required by

National and International Contracting Company

Knowledge and experience necessary of detailed price build-up for all trades for contracts up to and exceeding one million pounds. Particularly required is experience of usage of modern plant and equipment and modern constructional methods, home and overseas. Salary according to qualifications but in the range of £1,300 to £1,500 per annum. Pension Scheme. Apply
Box No. 1521 'The Builder'

ESTIMATOR/SURVEYOR

required by
progressive firm N.E. London

L.I.O.B. an advantage. Pension scheme. Apply in writing giving details to

Box No. 919, "The Builder"

SMALL Works Department ESTIMATOR/SURVEYOR. Good position for young man with initiative.—Write giving age, and experience. JAMES WEBB & SON, 326 St. John-street, E.C.1.

ESTIMATOR for civil engineering contracts; wide experience necessary in estimating for road and sewer works in connection with housing developments. £780-£1,135 with placing according to experience and qualifications. Superannuation. A house may be available if required.—Particulars and forms of Application from The Secretary, SCOTTISH SPECIAL HOUSING ASSOCIATION Ltd., 15-21 Palmerston-place, Edinburgh, 12.

LONDON BUILDERS Require ESTIMATOR/SURVEYOR, used to alterations and new works.—Apply giving details of experience, salary required, etc., to HOWARD & Co., 11-13 Broad Court, Bow-street, W.C.2.

TOKEN CONSTRUCTION CO. LTD.

require, due to re-organisation of Departments,

SENIOR ESTIMATOR
Fully experienced in all types of major projects, including large concrete structures. Capable of complete cost analysis in all trades.

ESTIMATORS
With sound technical knowledge of competitive tendering.

SENIOR SURVEYORS
With a sound knowledge of site surveying duties.
and
JUNIOR SURVEYORS
All applicants to reply in writing, giving age and experience, to:

Personnel Director,
Token Construction Co. Ltd.,
68, Mount Street, W.1.

CRENDON CONCRETE COMPANY LTD.,

Thame Road, Long Crendon, Bucks,
have the following vacancy:

ASSISTANT ESTIMATOR

required for work in connection with Framed Buildings, also with some knowledge of General Building Work. This is a permanent post with good rates of remuneration in an expanding firm. Please apply to **Crendon Concrete Company Ltd.** as above, or ring

Long Crendon 351/2.

SENIOR ESTIMATOR

(*Age about* 30)

Responsible to Head of Department for building works up to £100,000 in value. Central London Firm.

Contract Surveyor

(*Age about* 30)

To take charge of progress valuations, bonusing and final account work. Assistance given.

The above appointments are part of a policy of expansion of a successful firm and offer excellent prospects for advancement in a thriving and expanding business.

The successful applicants will be able to share in the prosperity they create—annual bonus on results.

Box No. 1632, "The Builder."

SENIOR BUILDING ESTIMATOR

Sir Lindsay Parkinson & Co. Ltd., invite applications for the above position in their London Office. Applicants, who must be fully experienced in preparing estimates for major schemes of all types, should forward all details to :—

Chief Surveyor,
Sir Lindsay Parkinson & Co. Ltd.,
6, Lambeth Road,
London S.E.1.

ESTIMATOR Required by a young, rapidly expanding London Company with a new approach to building construction. Must have up-to-date knowledge of prices in all trades over wide range of medium-sized buildings. Able to take-off own quantities quickly and accurately. Only very experienced applicants will be considered for this post with a Company with an international future.—Apply, giving full particulars of career to date and salary required, to A. H. ANDERSON, Ltd., 66 Victoria-street, London, S.W.1.

CHIEF ESTIMATOR

Applications are invited from experienced senior estimators for the above position.

The appointment, which is permanent and pensionable, lends opportunity to a keen estimator anxious to progress and control the estimating organisation of an expanding company.

Thoroughly experienced men only need apply.

Applications, giving details of age, experience and salary required, will be treated in strict confidence.

Box No. 1633, "The Builder"

ESTIMATOR

Required by
Ford & Walton Ltd.,

who will in approximately 1 year be moving office to Wembley Park—Applicants must be fully experienced and have a sound knowledge of modern building methods. Applications to Chief Estimator, stating age, experience and salary required.

FORD & WALTON LTD.,
Walton House, Warton Road, E.15.

SENIOR BUILDING ESTIMATOR

required. Should have had experience of competitive estimating for all types of major building projects and a sound knowledge of detail price analysis and be able to submit completed tenders with calculations for final discussion with the Head of the Department.

BUILDING ESTIMATOR

required, aged 25 to 35 years. Must be capable of estimating for all types of major building projects and have a sound knowledge of price analysis.
Apply in writing, in confidence, stating full details of experience, age and salary required to the

Personnel Officer,
Tarmac Civil Engineering Limited,
Ettingshall, Wolverhampton.

ESTIMATOR

required by large
Joinery and Door Manufacturers.

The position demands extensive experience in preparing and pricing tenders for mass-produced and specialised joinery with a proved capacity to work efficiently under minimum supervision. Permanent progressive post assured to the right man. Contributory Pension Scheme available after satisfactory probationary period. Applications containing detailed particulars of experience, qualifications, age, positions previously held, when available and an indication of salary expected, to be addressed to :—

The Managing Director,
The Rothervale Manufacturing Company Limited,
Woodhouse Mill, near Sheffield.

W. S. ATKINS & PARTNERS

require

A young man with experience in Consultant's office or Contracting Firm on Planning and Programming work in connection with the design and construction of Industrial, Civil Engineering, Structural and Building Works. Permanent post with 5-day week, L.V's and Pension Scheme. Please send full details to Personnel Manager, **158 Victoria Street, S.W.1.**

SHEPHERD

BUILDING MANAGER

For this senior position we require a man, preferably in the 35–45 age range, with a sound building background. His managerial experience must include full responsibility for all aspects of a number of building projects operating concurrently, with individual values running into six figures.

A successful production record, with special regard to quality of finish, on a wide range of buildings must be coupled with a genuine interest in modern management techniques and the ability to use them.
The company is long-established, well organised and progressive, and has a high reputation for quality and adherence to completion dates. It employs over 2,000 people and carries out more building in Yorkshire than any other contractor.

This responsible position based at our Head Office in York is permanent, does not involve lodging away and offers good prospects, substantial and progressive salary, bonus and non-contributory pension scheme. A car is provided and assistance with housing.
Written applications, which will be dealt with in strict confidence, should state age, outline of experience, approximate salary required and should be addressed to:

P. M. Shepherd, F.I.O.B., Managing Director,

F. SHEPHERD & SON LTD.,

Building & Civil Engineering Contractors,
Blue Bridge Lane, YORK

BUILDING AND CIVIL ENGINEERING CONTRACTORS

long established in North Devon have VACANCIES for the following STAFF:

1. **GENERAL MANAGER** aged 40/50 years.
2. **QUANTITY SURVEYOR** or qualified **ENGINEER** to deal with interim certificates and final accounts.
3. **ESTIMATOR** with essential experience in both building and civil engineering work.
4. Vacancies also occur for **ESTIMATORS** and **ENGINEERS** in the Midlands.

Please make application in your own handwriting giving details of your previous experience, age and salary expected to **Managing Director, JAMES DENNIS & SON LTD., KNOWLE, BRAUNTON, NORTH DEVON.** All applications will be treated in the strictest confidence.

PLASTERING CONTRACTORS

require

MANAGERS

Plastering Contractors of National Status require Surveyor-trained Managers who are at present employed in the Plastering Industry.

Salary £1,500 to £3,000 per annum depending on ability.

Applicants must be between the ages of 30 and 35 and must be able to take full control of businesses at Director level anywhere in the United Kingdom.

Applicants should give brief details of their careers to date, together with name of present Employer.

All applications in the strictest confidence and marked "Plastering Manager" to

Box 705, 'The Builder'

Sainsbury's

require a Deputy

to the Manager of their

Shop Planning Dept.

The post is a new one arising from the continuous growth in the number of the firm's large self-service stores and offers considerable scope for an energetic and ambitious man. The successful candidate will be primarily concerned with the interior planning and design of new and existing self-service stores, and will also require some structural knowledge. Preference will be given to a qualified architect between 25 & 35. Salary will be commensurate with age and experience but will be not less than £1,300 and the post is permanent and pensionable. Applications giving age and full details of experience, education etc. should be sent to:

The Secretary, SPD/1.

J. SAINSBURY LTD

STAMFORD HOUSE · BLACKFRIARS · S · E · 1

ESTIMATOR/ SUPERVISOR

required for Small Works Department of a larger Contracting organisation. This department specialises in smaller works and handles Contracts up to approximately £5,000 in central and West London area. Must be experienced in estimating for small conversions and general alterations to property. Progressive and permanent position. Pension Scheme. Salary in region of £900, car allowance and other expenses: 2 weeks H.W.P. this year.

Box 1489 "The Builder".

PAINTING COMPANIES

require

MANAGING DIRECTORS

Applications are invited from individuals fully trained in the control and management of specialist painting businesses for appointment as Managing Directors in Companies operating in various areas of the United Kingdom.
Commencing salary up to £1,750 according to qualification, plus bonus and expenses.
Applicants who should not be over 40 years of age, should apply in writing giving brief details of career to date, together with name of present Employer. All applications will be treated in strictest confidence and should be marked "Painting Manager" to

Box 706 'The Builder'

MSL *have been retained to advise on the appointment of a*

BUILDING GENERAL MANAGER

(Housing estates)

for a group with long established building and construction interests in U.K. and Commonwealth and headquarters in London. The group is now expanding its housing division and a General Manager is required to control this division's building contracts; projects amount to over £2 million value.

Experience of site supervision on large housing developments is essential together with experience of controlling a number of contracts running concurrently.

Preferred age 35—45. Commencing salary dependent on experience but about £2,000 envisaged. Car supplied. Superannuation.

Please send brief details in confidence, quoting reference Y.2257, to W.F. Younger.

In no circumstances will a candidate's identity be disclosed to our client unless he gives permission after a confidential interview at which he will be given full details of the appointment.

MANAGEMENT SELECTION LTD.
17, Stratton Street, London, W.1.

MANAGERS

GENERAL MANAGER. Large Estate Developers, Southern England. Require a GENERAL MANAGER, operating from London, to take complete charge of housing production on various sites. Previous large scale building experience is essential and any in the House Building industry advantageous. The Salary will exceed £2,000 per annum, plus Bonus; a Car provided and Pension rights and other amenities available.—Applications which will be treated in strictest confidence should state age, training, past and present employers, experience, outside interests and sent to Box 1250, "The Builder."

CONTRACTS MANAGER, Houses and Flats, North West London area.—Full details past experience and salary required to Box 944, "The Builder."

PLANNING DEPARTMENT

SENIOR EXECUTIVE

National Building Contractors require an experienced controller to Head this Department responsible for:—

(i) Preparation of outline schemes for major building contracts at the tender stage.

(ii) Preparation of comprehensive method statements for all new contracts, including plant lay-out drawings, formwork and mould design, scaffolding schemes and other aspects of technique and cost in co-operation with management and site staff.

(iii) Provide sites with initial site setting out services.

This is a senior appointment and a person with enthusiasm and all-round experience is required. Brief details to Contracts Director:—

Bernard Sunley & Sons,
25 Berkeley Square, London, W.1.

AREA MANAGER
SOUTH WALES

Large Building and Civil Engineering Contractors invite applications for the above responsible and progressive position, based at their Cardiff office. Applicants, who should be capable of using own initiative in handling large contracts from the initial enquiry to the final account, should send full details to Director,

Box B 963 LPE,
Romano House, 399/401, Strand,
London, W.C.2.

COACHBUILDING SUPERINTENDENT

The ROYAL ARSENAL CO-OPERATIVE SOCIETY LIMITED invites applications from experienced and qualified men for the position which entails responsibility to the Works Manager for the control of the Coachbuilding department with a staff of 56 men employed on vehicle body building, construction and maintenance.

Candidates should be competent to design from chassis plans for all types of vehicles, prepare estimates for new body work from approved designs and superintend the maintenance, running repairs and major overhauls of a large fleet of vehicles of all descriptions.

Applications should state age and give full particulars of experience and qualifications, with salary required, to:

The Staff Manager,
71 Powis Street,
Woolwich, S.E.18.

Wanted, a Technical-trained man centred in Birmingham / Wolverhampton area, age group 30/40 years, well versed in Building Construction in all its phases, to take up a position with a company introducing a new development in Building.

Ability to interview Architects and Engineers at top level is essential and connections with Local Authorities and National Boards desirable.

Please write, giving age, qualifications and experience, and salary required, to

Box No. 1563, "The Builder"

CONTRACTS MANAGER Required for supervision of Housing Contracts in South Wales area. Applicants must be fully conversant with the organisation of large and small contracts running simultaneously. Car provided.—Full particulars to General Manager, DRURY CONSTRUCTION (SOUTH WESTERN) Ltd., 9 Broad-quay, Bristol, 1.

IMPORTANT Contractor of National repute is to appoint

TWO TRAINEE BUILDING MANAGERS

One for each of main offices Southern and Midlands regions. Good background of industry essential.

Young men of good presence, strength of character and determination, willing to accept 2 years' serious training. Excellent prospects. Expanding organisation. Age about 25 years.

Commencing salary £1,000 p.a. Pension and bonus schemes.

Write full personal details, previous training, qualifications and experience, state preference Midlands or South, to Box No. DL. 4515, c/o WHITE'S, 72 Fleet-street, London, E.C.4.

PLANT MANAGER Required to take charge of plant department of medium-sized firm of Building and Civil Engineering Contractors. Only personnel with previous experience in handling a plant department and with appropriate administrative experience should apply. A car will be provided and the position will not involve living away from home. The appointment will carry a four-figure salary and will be permanent after a probationary period and the applicant will then be considered for superannuation benefits.—Applications giving full particulars to Wm. EAVES & Co. Ltd., Vicarage-lane, Blackpool.

ASSISTANT to Building Manager Required by small expanding contractors Romford area, carrying out alterations, conversions, shopfitting and new works to £30,000. All duties.—Write fully stating salary required to Box 922, "The Builder."

ASSISTANT Required for Works Manager to Building Contractors in High Wycombe area engaged on housing estates. Must be experienced in setting out levels, supervision and requisitioning of materials. Applicant should have held position of general foreman for at least three years.—Box 1584, "The Builder."

JOINERY MANAGER

MANAGER, potential Managing Director, Required by a medium-sized joinery works in the South Midlands. A man in his middle thirties is sought who can take complete charge of a works with a £½ million turnover consisting of high quality fittings and the standard components of an all-timber prefabricated system of construction. Commencing salary £1,500 p.a. plus share in profits.—Box 1585, "The Builder."

REQUIRED immediately, MAN with good knowledge of Facing Bricks and for taking charge of Quotation section of well known London Builders' Merchants. Own employees know of this advertisement.—Full particulars to Box 1586, "The Builder."

ASSISTANT TO MANAGER Required by progressive old-established Company. Good knowledge of estimating essential and capable of generally assisting with Managerial problems. Salary around £750. Applicant must hold current driving licence and be of the 25-35 age group. Excellent prospects for man with ability and initiative.—Write full details to E. H. CUMMINS & Co. Ltd., Station-road, Dorking, Surrey.

GENERAL SALES MANAGER Wanted by sole importers of glass mosaics. Those able to generate value sales can earn high remuneration.—Write stating age, experience and full curriculum vitae and present emolument to Box 1624, "The Builder."

JOINERY WORKS MANAGER Required by trade shop, purpose made joinery.—Particulars of age, experience and salary to Box 1625, "The Builder."

CLERKS OF WORKS

EXPERIENCED CLERK OF WORKS Required for the construction of a new office block and conversion of existing premises in West End. Applicants should have extensive experience of R.C. construction and high quality conversion works. Salary £1,000 to £1,200 per annum according to experience.—Apply to MESSRS. C. H. ELSOM & PARTNERS, 10 Lower Grosvenor-place, London, S.W.1. VIC 4304.

CLERK OF WORKS Required to superintend the erection of new buildings for St. Luke's College in Exeter, work on which is expected to begin in April, 1960, and be completed about August, 1961. Candidates must be experienced Clerks of Works with a good knowledge of all building trades including reinforced concrete work. A good salary will be offered to a man with the right qualities and good experience.—Applications giving full details of past experience, age and salary should be sent to the Architects appointed by the College, LOUIS DE SOISSONS, PEACOCK, HODGES, ROBERTSON & FRASER, 12 Baring-crescent, Exeter, not later than 29th February, 1960.

CLERK OF WORKS Required, Secondary Modern School, Hartford, Cheshire. Work commencing April, 1960, for fifteen months.—Reply Box 1588, "The Builder."

CLERK OF WORKS Required, Secondary Modern School Dukinfield, Cheshire. Work commencing early April.—Write, stating experience and salary required, Box 1589, "The Builder."

BUYERS

CHIEF BUYER Required by National Building Contractors for their centralised Buying Department, London. Applicant aged 33-45 with sound experience, personality and ability direct staff and control expanding department. Progressive salary, pension scheme, excellent prospects.—Apply Box 1626, "The Builder."

REPRESENTATIVES

EXPERIENCED REPRESENTATIVE Required for the sale of Precast Concrete products ranging from Piles, R.C. Frames, Exposed Aggregate Cladding Slabs, etc., by leading firm of Precast Concrete Manufacturers situated in Essex. Should have existing connections. Must be of good appearance and able to make contacts at the highest level. Apply in writing, giving details of past and present position with salary required. Company car provided, bonus and superannuation scheme in operation. All replies treated in confidence.—Box 1522, "The Builder."

FIRST-CLASS SALESMEN calling regularly on builders, builders' merchants, to handle an extra line in regular demand. Exceptional remuneration by generous commission scale.—Write: Box 1260, "The Builder."

REPRESENTATIVE with proven selling experience in the field of Facing Bricks, calling on London and/or provincial Architects, Required at once. No agents.—Full particulars, Box 1587, "The Builder."

EXPERIENCED REPRESENTATIVES already calling on woodworking trades and large timber users, Required in various areas to sell established line, with large and rapidly expanding potential, of heavy duty fastening equipment, including consumable fasteners. Exclusive territory and generous commission terms offered.—State age, experience, territory covered to Box 1610, "The Builder."

BUILDERS ASSISTANTS

ASSISTANT to prepare Accounts for jobbing work, able to estimate for small works, Required by East Dulwich Contractors.—Apply stating age, experience and salary, Box 1297, "The Builder."

BUILDER'S ASSISTANT Required for fluctuations claims and to assist in Surveyor's Office.—Apply stating age, experience and salary required to MESSRS. A. T. ROWLEY (LONDON) Ltd., Cambridge Works, Lordship-lane, Tottenham, N.17. TOTtenham 3611.

FORD & WALTON LTD.,
WALTON HOUSE,
WARTON ROAD, E.15.

whose offices will be moving to Wembley Park within 12 months require a young man to be trained as an

ASSISTANT

in their Shuttering Department. Ultimate duties will be measuring for and computing weekly bonus, preparing final accounts and the keeping of costs and other records. Preference will be given to a young man who has had some surveying experience but all applications will be considered. This is an interesting position in a specialised branch of the industry that is becoming increasingly more important. Applications in own handwriting giving age, salary required, details of education and previous employments, etc. should be addressed to **The Personnel Manager** at the above address.

YOUNG BUILDER'S ASSISTANT for Estimating Dept., Holborn district.—Write fully, stating experience and salary required to Box 1565, "The Builder."

AGENTS

AGENT/GENERAL FOREMEN Required. Applications invited from first-class men.—Write, giving full details of past experience and salary, etc., to PERCY BILTON Ltd., Bilton House, Ealing, W.5.

ASSISTANT SITE AGENTS Required for Building Contractors specialising in large scale factory and warehouse construction. Applicants must be mobile with good site experience and preferably with technical qualifications. Permanent positions with good opportunities for advancement.—Box 1523, "The Builder."

ENGINEER/AGENT

Required immediately, AGENT thoroughly experienced in high quality Reinforced Concrete, Coffer Dams and working under ground water conditions. Superannuation scheme in operation. Write giving age, experience, salary required and full details.—J. L. EVE CONSTRUCTION CO., Ltd., 17 Hillside, Ridgway, Wimbledon, S.W.19.

SENIOR SITE AGENTS, accustomed to handling contracts no less than £500,000, with considerable experience of reinforced concrete. Required for work in London and Home Counties. Good opportunities for capable man and superannuation scheme in operation.—Brief details to Contracts Director, BERNARD SUNLEY & SONS Ltd., 25 Berkeley-square, London, W.1.

SIR LINDSAY PARKINSON & CO., Ltd., Require SITE AGENTS and GENERAL FOREMEN for their speculative housing and flat contracts.—Please reply attention Mr. Lindsay, SIR LINDSAY PARKINSON & CO., Ltd., 6 Lambeth-road, London, S.E.1.

AGENT
INDUSTRIAL DEVELOPMENT

Vacancy exists for top grade man for Contract in East Scotland. Applications will be considered only from men of proven ability in this field who can match quality with really quick building. Excellent salary, allowances and superannuation will be offered to suitable candidate. Apply in confidence to—

Box No. 1595, "The Builder"

Due to continued expansion at home and overseas

BERNARD SUNLEY & SONS LIMITED

have vacancies for top-grade staff for new large contracts in London and the Home Counties as well as South Coast region. Applications are invited for:—

(i) **AGENTS for R.C.** framed buildings of some magnitude with heavy foundations. Experienced use modern plant, shuttering and scaffolding techniques and ability conform pre-planning and building programme on contracts valued up to £2,000,000.

(ii) **SENIOR GENERAL FOREMAN** with similar experience and capacity for early promotion to Sub-Agent.

(iii) **CONTRACT SUPERVISORS** for controlling number of building contracts of value up to £500,000.

Excellent opportunities for men of real ability to join a progressive and expanding organisation. Good and progressive salaries with assured future for suitable candidates. Pension and Life Assurance Scheme. Write *Contracts Director*,

Bernard Sunley & Sons Ltd.
25 Berkeley Square, London, W.1.

SENIOR BUILDING AGENTS

GEORGE WIMPEY & CO. LIMITED, propose to recruit a limited number of Senior Building Agents for Contracts in London and the Home Counties.

Applications are invited from men aged 35 to 45 who have varied experience of Contract building and, in addition, have a proven record of supervision of Contracts.

The appointments are permanent and will carry a good initial salary. Opportunities exist for promotion within the Company for successful applicants. A contributory Pension Scheme is in operation.

Please write in the first instance to the—
Establishment Officer,
27, Hammersmith Grove,
London, W.6.
Ref. 887A

SITE AGENT

required for erection of multi-storey building in Worthing area; applicants must have first-class experience of reinforced concrete frame construction and piling and be used to full control of site. Salary according to experience. Apply in confidence, giving full particulars of previous experience and qualifications to Managing Director,

WESTMINSTER CONSTRUCTION CO. LTD.,
36 Westminster Palace Gardens,
Artillery Row,
Victoria Street, London, S.W.1.

BUILDING AGENT

Applicants must have had experience in charge of reinforced concrete framed buildings up to £500,000, preferably multi-storey construction. Excellent salary offered to man capable of producing high quality work to tight schedules. Permanent staff appointment; Pension Scheme in operation. Applications stating age, experience and salary to Contract Labour Department, **Simon-Carves Limited, Cheadle Heath, Stockport, Cheshire, quoting reference BA.16.**

SENIOR SITE AGENTS

Sir Lindsay Parkinson & Co. Ltd., invite applications for the above positions. Applicants who must be fully experienced n carrying out major building contracts of all types should forward all details to:

Building Director,
Sir Lindsay Parkinson & Co. Ltd.,
6, Lambeth Road,
London, S.E.1

Expanding North West Company of
STRUCTURAL STEELWORK ENGINEERS
require

AGENTS

with live connections with Architects, Local Authorities, Engineers, etc., in various parts of the country. Applications will be considered from those who already have agencies for associated trades.
Please write in confidence stating age, experience, etc. to
Box. 1520

JAMES LONGLEY & CO. LTD of CRAWLEY, SUSSEX,
invite applications from experienced

AGENTS

expecting to be available during 1960. Good organisers capable of taking full responsibility for substantial projects in Southern and South Western England are invited to submit in writing to the Secretary details of their experience, salary required and availability.

W. J. WHITTALL & SON, LTD.
Birmingham and London

have vacancies for

AGENTS
GENERAL FOREMEN
and
DEPUTY FOREMEN

on contracts in the Midland area and other parts of the country, who have sound constructional knowledge and are experienced in the speedy erection of industrial and other buildings.

The posts carry good salaries commensurate with abilities and written application enclosed in an envelope marked "Confidential", should give details of age, training and career to:

W. J. WHITTALL & SON, LTD.
Builders and Civil Engineers,
132 Lancaster Street,
Birmingham 4.

SITE AGENT

required for City Office Building with steel frame and unusual form of precast floor construction, by

McLAUGHLIN & HARVEY, LTD.
24, Highbury Grove, N.5.
CANONBURY 2476.

Only men with previous experience of City Building will be considered and only those who can exercise drive and produce quality work to a tight building programme.

SENIOR SITE AGENT

required
for £600,000 Contract in Central London.
High salary and good bonus for experienced man.
Y. J. LOVELL & SON, LTD.,
4, ENDSLEIGH GARDENS, W.C.1.

FOREMEN & SUPERVISORS

GENERAL FOREMEN Required immediately for Contracts approximately £60,000 each: small housing estate in Highgate, N.6 or Conversions in Hackney area.—Apply in writing, stating age, experience, previous employers, to POOLMAN (BUILDERS) Ltd., Sutherland House, Edgware-road, N.W.9.

SUPERVISOR, able to control site works. Required for medium-sized builders, N.W. London. Must have knowledge and experience of all trades and medium-sized contracts, new conversions, etc. Must be keen organiser and able to drive car. Apply stating age, experience and salary required.—Box 1524, "The Builder."

GENERAL FOREMAN Required for old-established Building Contractors for work up to £40,000 per contract.—Details to Box 1525, "The Builder."

GENERAL FOREMAN Required for medium size building work to be carried out in the London area. Applications will only be considered from men who have been engaged for some years on work demanding a high standard of finish, and who have a proved record of successful work in this field. Salary not less than £1,200 per annum for the right man, plus bonus, and pension scheme after approved period with opportunities for advancement.—Apply by letter only to the General Manager, THE UNIT CONSTRUCTION CO. Ltd., Central-way, Feltham-road, Feltham, Middlesex.

SEWERS FOREMAN Required by GREENWICH BOROUGH COUNCIL. Salary Miscellaneous Grade III (£525-£590 p'us £30 London Weighting at age 26 or over). Commencing salary according to experience. Applicants must have experience of sewer construction and maintenance, and able to handle a small sewers gang.—Application forms from Town Clerk, Town Hall, Greenwich, S.E.10, returnable by 10 a.m. on 7th MARCH, 1960.

BUILDING GENERAL FOREMEN. Only men with experience on contracts ranging from £50,000 to £500,000 need apply. Applicants must be willing to travel in the United Kingdom. Permanency offered and pension scheme.—Apply, stating experience and remuneration required, to THE MITCHELL CONSTRUCTION COMPANY Ltd., Wharf Works, Peterborough.

WORKING FOREMAN Required (Carpenter and Joiner) for small contract of Shops and Offices in Woking. Good opportunity for advancement for live, keen and reliable man.—Apply for interview by 'phone or letter to SLOGGETTS (CONTRACTORS) Ltd., 209 High-street, Hampton Hill, Middlesex. Teddington Lock 3303.

BUILDING SUPERVISORS: Capable and energetic SUPERVISORS Required to take charge of a series of multi-storey block and factory contracts. Only above average applicants need apply. This is a first-class opportunity for a man having an all-round experience of the building industry who is prepared to prove his value. The advertised position offers great scope to a conscientious man.—Box 1590, "The Builder."

GENERAL FOREMAN Required, Housing Contract Reading.—Box 1591, "The Builder."

ASSISTANT GENERAL FOREMAN Required, Housing, Reading area.—Box 1592, "The Builder."

JERSEY, C.I. Property Company Requires FOREMAN to take charge of developments. Would be required to take practical part in large and small schemes. Permanent living accommodation arranged after probationary service. Salary £1,000 per annum to suitable applicant.—Write giving full details of last five years' employment and experience and any other relevant information to The Secretary, PROPERTY HOLDINGS, Ltd., P.O. Box 48, Jersey, C.I.

ACTIVE GENERAL FOREMEN Required Housing Estates Hampshire and Barnet area. Only good men need apply.—Box 933, "The Builder."

GENERAL FOREMAN Required to work in the Bournemouth and New Forest area. The successful applicant will be under the age of 45, of proved ability and have drive.—Reply giving details of experience and salary required.—NEW FOREST CONSTRUCTION COMPANY LIMITED, Gore-road, New Milton, Hampshire.

EXPERIENCED GENERAL FOREMAN Required for a large municipal flat contract in East Ham.—Apply in writing, RICHARDSON, Herbert House, Slade Green, Erith, Kent.

THE SPOONER GROUP

Continued expansion to all parts of the British Isles permits us to offer employment to suitably qualified

GENERAL FOREMEN

particularly on Housing, Schools and Hospitals.

Applicants must be mobile and of sound experience in handling complete contracts.

Apply in confidence stating age, experience and indication of salary required to:

SPOONERS (HULL) LIMITED, Stoneferry, Hull

GENERAL FOREMAN

required for Housing and General Building Contracts in North Sussex, Surrey and West Kent areas. The applicants will be required to be experienced in working under a modern conception of organisation, planning and control. They should be capable of controlling direct labour, materials and specialists in achieving keen and well co-ordinated programme dates. The position offered is with a rapidly expanding Company and will offer permanent and progressive opportunity to Senior Management status for suitably qualified men, who are prepared to show ambition, industry and initiative.

Apply in writing giving details of experience to:—

G. T. Crouch Ltd., Contracts Division, Kingston House, Stephenson Way, Three Bridges, Crawley Sussex.

WILLIAM WILLETT (Contractors) LTD.

require

SENIOR GENERAL FOREMAN

for new contracts in the London and Surrey Area. Multi-storey reinforced concrete buildings of good construction and finishings. Preferably of Carpenter-Joiner background, but essentially experience in work of this nature. Excellent salary and prospects. Apply giving full details of experience to—

SLOANE SQUARE, LONDON, S.W.1

SENIOR GENERAL FOREMAN

urgently required for large LONDON contract **SALARY** up to **£1,500 p.a.**

Apply Box 1495

GENERAL FOREMAN

Required for erection of New College in S.E. London, approx. £150,000. Must have ability and experience in all Trades and modern techniques.

Write, giving full details of experience and salary required to —

Prestige & Co., Ltd., 149, Grosvenor Rd., S.W.1.

APPLICATIONS are invited by an old-established building firm on the South Coast for the position of CONTRACTS SUPERVISOR. Applicants must have sound knowledge of modern building methods and plant, had previous experience in such a capacity and be capable of thoroughly organising and controlling several contracts concurrently. Full details of experience, contracts undertaken, age and salary required to Box 1628, "The Builder."

McLAUGHLIN & HARVEY LTD.
require

GENERAL FOREMEN

for high class commercial and industrial contracts, London and outskirts. Applicants who are engaged and prove ability, can join permanent staff Life Insurance & Pensions Scheme. Following particulars must be given in writing before interview—age, trade, experience, previous employers, to McLAUGHLIN & HARVEY, LTD., 24, Highbury Grove, N.5.

STAIRCASE CHARGE-HAND/FOREMAN required.—Write stating experience and salary required to J. R. WELCH & CO., Ltd., 145 Effra-road, Wimbledon, S.W.19.

THOMAS LOWE & SONS, LTD., of Curzon-street, Burton-on-Trent, have a vacancy for a BUILDING SUPERVISOR in the Birmingham area. Applicants must have had previous experience of taking charge of several building contracts under supervision of an Area Manager. Applications should be submitted in writing stating age, experience and salary required.

EXPERIENCED GENERAL FOREMAN Required to take full charge of high class Contract of approx. £240,000 in Oxford. Must be cost conscious, able to work to detailed programming and completion dates. Apply in writing, giving full particulars of positions held, contracts carried out and salary required. Good references essential.—Apply J. PARNELL & SON Ltd., Oliver-street, Rugby.

GENERAL FOREMAN. Able to take complete control of Housing Estate, set out levels, etc., supervise all labour. Only men with highest references will be considered. Generous salary, bonus and permanent position to successful applicant.—Apply in writing, Managing Director, FITTED HOMES GROUP, 225 Frimley Green-road, Nr. Aldershot, Hants.

GENERAL FOREMEN Required for various Building Contracts shortly to commence in the South of England.—Apply in writing, stating age, experience and salary required, to LOWTON CIVIL ENGINEERING Ltd., 102 Connaught-road, Reading, Berkshire.

GENERAL FOREMAN Required for private enterprise flats schemes in S.W. London. Only men experienced in this type of construction, accustomed to handling sub-contractors in all trades and producing and finishing first-class properties need apply.—Write, stating age, experience and salary required, to Box 1389, "The Builder."

FOREMEN Required, fully experienced Reinforced Concrete framed buildings, Hollow Tile floors, Precast erection, etc. Must possess necessary drive to get out on cost, with good workmanship. Permanent position for right men. To operate mainly in Greater London area.—Apply Box 1390, "The Builder."

EXPERIENCED GENERAL FOREMAN Required initially for a job in South East London. Bricklayer preferred. This is a permanent well-paid position with an expanding Company, with admission to a Pension Scheme after a probationary period.—Apply Box 1405, "The Builder."

GENERAL FOREMAN Required by National Contractors for Speculative Housing in the Kent Coast area. Permanent well-paid pensionable position for experienced man.—Full particulars to Box 1406, "The Builder."

SENIOR BUILDING FOREMAN Required for London and Provinces.—Please apply in writing stating experience and salary required to Mr. G. H. Burton, THE DEMOLITION AND CONSTRUCTION CO., Ltd., Mitcham-road, Croydon, Surrey.

GENERAL FOREMEN Required by National Contractors for Speculative Housing in the Reading and Southampton areas. Permanent, well-paid pensionable positions for experienced men.—Full particulars to Box 1275, "The Builder."

SITE FOREMAN Required for private enterprise Housing Estate at Wendover. Must be accustomed to handling sub-Contractors in all trades. Experienced men only capable of producing and finishing first-class properties need apply.—Write giving details of age, experience and salary required to Box HD 1274, "The Builder."

GENERAL FOREMAN Required for medium-sized office building at Dagenham. Experienced R.C. work.—Reply giving details experience and salary required, Box 1299, "The Builder."

EXPERIENCED GENERAL AND FINISHING FOREMAN Required for contracts in Home Counties and South Midlands.—Applications stating experience, age, salary required and when available to F. J. MINNS & CO., Ltd., 9 West-way, Botley, Oxford.

GENERAL FOREMAN, of drive and ability, Required. Must be able to work to programmes, and accustomed to R.C. work. Opportunities for advancement for right man.—Apply stating experience and salary required to COURTENAY & FAIRBAIRN Ltd., 377 Albany-road, S.E.5.

GENERAL FOREMAN

Old established National Building Contractor in Midlands Area has vacancies for top grade General Foreman for large building Contracts to commence shortly. C. & J. trained and have been responsible over recent years for successfully carrying out large Contracts embracing factories, office blocks, public buildings, reinforced concrete, etc., with minimum of supervision.

Fully conversant with modern techniques and possessing drive and initiative.

Top rate salary and allowances to suitable applicants addressed to

Box No. 1544

SENIOR GENERAL FOREMAN

Applications invited by National B. & C.E. Contractors from experienced men in reinforced concrete work and Civil Engineering type Contracts. Must have had previous recent experience in charge of large scale jobs with National Contractors—able to work with minimum of supervision and thoroughly conversant with all modern methods and plant and possessing drive and initiative. A good salary and terms to suitable applicants. Send full details to

Box No. 1543

PAINTING SUPERVISOR

Well known Painting Contractors require experienced and energetic Supervisor to cover the Greater London area. Good salary plus twice yearly bonus on results. Car supplied. Applications will be treated in strict confidence and should give full details of previous experience, present employer, age and salary expected. Apply

Box No. 1627 'The Builder'

CONTRACTS SUPERVISOR

This vacancy is for a man of 30/40 years of age, who is keen and ambitious, and constantly alert to the mechanisation of all work possible.

Preference will be given to those with Planning experience and sound technical knowledge of concrete practice.

Previous experience must include working on confined sites in Central London and on Industrial Works on large open sites.

Work in first instance will be on sites up to £250,000.0.0 in value.

Applications in strictest confidence must give details of education and experience to Managing Director,

Box No. 1634, "The Builder"

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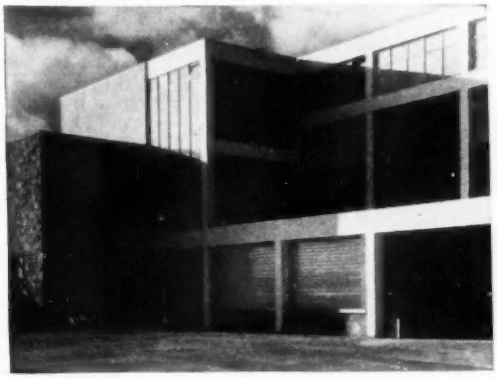

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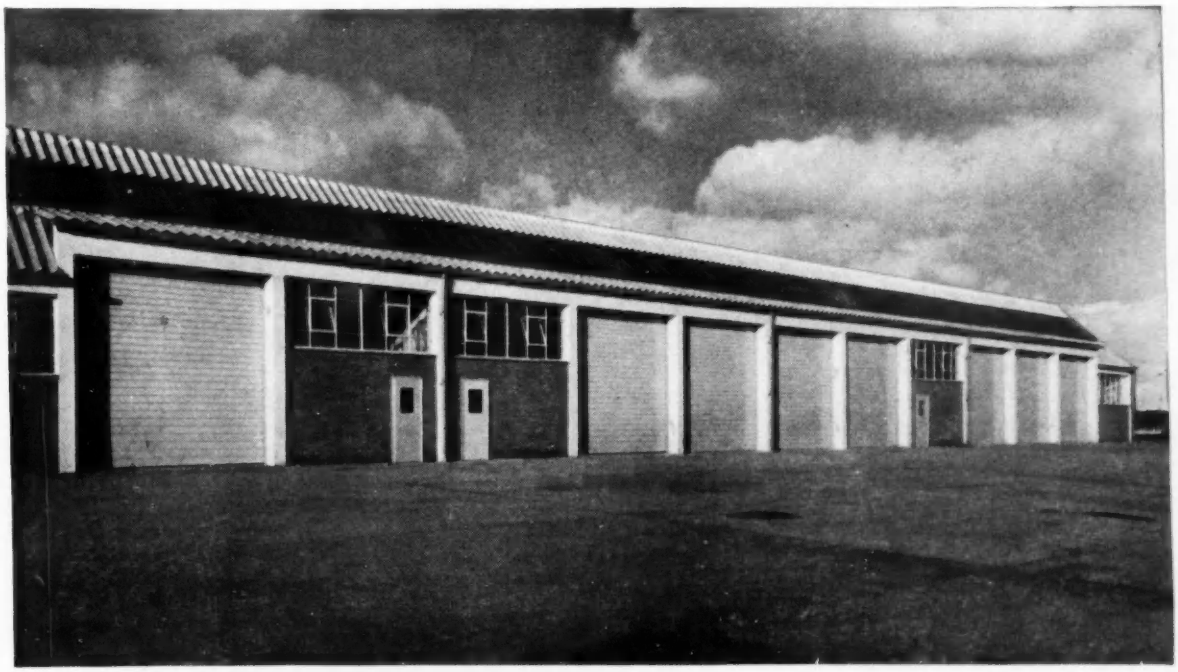

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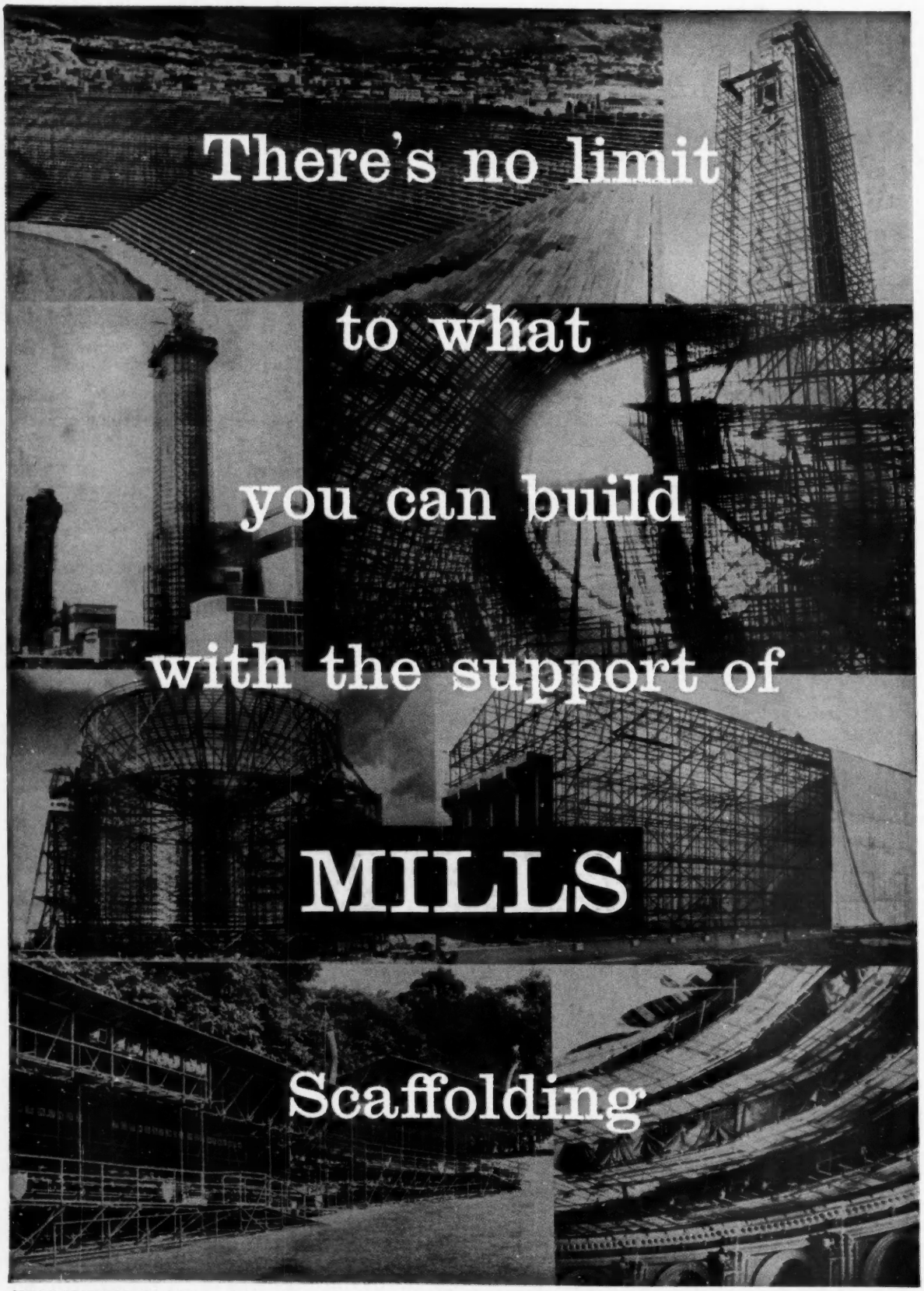

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